



December 26, 2018

QUARTERLY REPORT

This Quarterly Report has been prepared by Banco do Brasil S.A., for its role as Bond Administrator in connection with the issuance of (a) US\$ 2,000,000,000 aggregate principal amount of 6.25% Series 2014-1 Notes due 2024 (the "Series 2014-1 Notes"); (b) R\$ 2,400,000,000 aggregate principal amount of 16.25% Series 2014-2 Notes due 2022 (the "Series 2014-2 Notes"), (c) US\$ 1,100,000,000 aggregate principal amount of 6.75% Series 2014-3 Notes due 2027 (the "Series 2014-3 Notes"); and (d) US\$ 600,000,000 aggregate principal amount of 8.20% Series 2018-1 Notes due 2028 by Rio Oil Finance Trust and in accordance with the terms set forth in the Amended and Restated Indenture dated as of June 20, 2014, and as amended and restated as of April 03, 2018 (the "Indenture"), in the Amended and Restated Series 2014-1 Indenture Supplement and the Amended and Restated Series 2014-2 Indenture Supplement, dated as of June 20, 2014, and as amended and restated as of March 07, 2018, in the Amended and Restated Series 2014-3 Indenture Supplement dated as of November 21, 2014, and as amended and restated as of March 07, 2018, and in the Series 2018-1 Indenture Supplement dated as of April 19, 2018 (the "Indenture Supplements").

Some of the terms set forth in the Indenture and in the Indenture Supplements were amended by that certain Waiver and Amendment Agreement dated as of October 20, 2015 (the "First Waiver and Amendment Agreement"), by that certain Waiver and Amendment Agreement dated as of June 20, 2016 (the "Second Waiver and Amendment Agreement"), by that certain Waiver and Amendment Agreement dated as of October 11, 2016 (the "Third Waiver and Amendment Agreement"), by that certain Rescission and Amendment Agreement dated as of December 05, 2016 (the "Fourth Rescission and Amendment Agreement"), by that certain Rescission and Amendment Agreement dated as of December 04, 2017 (the "Fifth Rescission and Amendment Agreement"), and by that certain Waiver, Rescission and Amendment Agreement dated as of March 07, 2018 (the "Sixth Waiver, Rescission and Amendment Agreement"), and are fully reflected in all calculations of this Quarterly Report.

The duties and obligations of Banco do Brasil S.A. is determined solely by the express provisions of the Indenture and the other Transactions Documents which it is a part, such as the responsibility for producing the Bond Administrator Reports. Banco do Brasil S.A. shall not be liable except for the performance of such duties and obligations.

Banco do Brasil S.A. may conclusively rely as to the truth of the statements and the correctness of the opinions expressed in any Transaction Document and upon any statements, certificates or opinions furnished in writing to Banco do Brasil S.A. pursuant to any of the Transaction Documents and conforming to the requirements of the Transaction Documents. Banco do Brasil S.A. may conclusively rely upon, and shall be protected in acting or refraining from acting upon, and shall not be bound to make any investigation into the facts or matters stated in a written resolution, certificate, statement, instrument, opinion, report, notice, request, consent, order, note, Officer's Certificate, guaranty or other paper or document reasonably believed by it to be genuine and to have been signed or presented by the proper Person(s).

This Quarterly Report is addressed exclusively to Rio Oil Finance Trust (the Issuer), to Fundo Único de Previdência Social do Estado do Rio de Janeiro – Rioprevidência (the Sponsor), to Citibank N.A. (the Indenture Trustee), to Standard & Poor's Financial Services, LLC and Fitch Ratings, Inc (the Rating Agencies).

The Reporting Period for this Quarterly Report is from, and including September 23, 2018 and ends on, and including, December 22, 2018. The exchange rate for dollar/rea's conversion used in this Quarterly Report is R\$ 3.8991. The Reais Allocation Date during such Reporting Period and the related exchange rate for dollar/rea's conversion used in this Quarterly Report happened in:

Date	Exchange Rate	Date	Exchange Rate
Oct 15, 2018	R\$ 3.7198	Nov 29, 2018	R\$ 3.8568
Oct 23, 2018	R\$ 3.7059	Dec 14, 2018	R\$ 3.8996
Nov 13, 2018	R\$ 3.7970	Dec 20, 2018	R\$ 3.8437
Nov 27, 2018	R\$ 3.8925		



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Defined Terms

“Bond Administration Report” shall mean any Transfer Report, any Monthly Report and any Quarterly Report.

“Collections” shall mean, with respect to any period of time, all income, revenue, receipts, collections, the Series Purchase Prices of an Optional Redemption, the RJS Damages, the Sponsor Refund Obligations, and proceeds of the foregoing received by the Servicer with respect to the Collateral during such period of time.

“Officer’s Certificate” shall mean, in the case any of the Issuer and the Sponsor and the Indenture Trustee, a certificate signed by an Authorized Officer or the president or chairman (or other equivalent officer) of such Person or acting on behalf of such Person.

“Person” shall mean any individual, corporation, company, partnership, joint venture, trust, estate, unincorporated association, Governmental Authority or other entity of whatever nature.

“Quarterly Reporting Period” shall mean (a) initially, the period commencing on the Closing Date and ending on, and including, September 22, 2014 and (b) subsequently, from, and including, the calendar day immediately succeeding the final day of the immediately preceding Quarterly Reporting Period, to, and including, the twenty-second calendar day of the third succeeding calendar month; provided that, for the initial Quarterly Reporting Period for the purpose of determining the Debt Service Coverage Ratio, the Annualized Average Debt Service Coverage Ratio, the Forward-Looking Debt Service Coverage Ratio, the Minimum Average Forward-Looking Debt Service Coverage Ratio, the Subordinate Debt Service Coverage Ratio, and the Subordinate Annualized Average Debt Service Coverage Ratio and to the extent used in any of the foregoing terms for the initial Quarterly Reporting Period, the Quarterly Debt Service and the Subordinate Quarterly Debt Service any reference to such initial Quarterly Reporting Period shall instead refer to the Quarterly Reporting Period (Alternate Initial).

“Reais Allocation Date” shall mean, with respect to any Reais Transfer Date, the Business Day which is immediately prior to such Reais Transfer Date.

“Reais Transfer Date” shall mean each Business Day of each calendar month following a Business Day when, as of the Balance Transfer Time for the Bond Administrator, there are available funds in the Collections Account for allocation in accordance with the Indenture.

“Transaction Documents” shall mean, collectively, the Indenture, the Series 2014-1 Notes, the Series 2014-2 Notes, the Series 2014-1 Indenture Supplement, the Series 2014-2 Indenture Supplement, the Bill of Sale, the Royalties Rights Agreement, the Servicing Agreement, the Pledge Agreement, the Trust Agreement, the Initial Oil Revenue and Rights Bill of Sale, the Banco do Brasil Oil Revenue and Rights Bill of Sale, the Caixa Oil Revenue and Rights Bill of Sale, the Instruments and any Indenture Supplements with respect to future Series of Instruments, and any purchase agreement related to the Instruments.

“Reporting Period” shall mean a Monthly Reporting Period or a Quarterly Reporting Period.



Section (A) – Collections Revenue and Expense Breakdowns

The tables below show the total Collections received by Banco do Brasil S.A. on such Allocation Date, with respect to the Collateral of the transaction.

RJS Oil Revenues and RJS Oil Revenue Rights	Amount
Royalties – up to 5% (Law N° 7,990 of December 28, 1989)	R\$ 735,971,355.78
Royalties – more than 5% (Law N° 9,478 of August 6, 1997)	R\$ 568,427,089.72
Special Participations (Law N° 9,478 of August 6, 1997)	R\$ 2,708,344,323.56
FEP (Special Petroleum Fund) – Law N° 7,990 and Law N° 9,478	R\$ 2,343,388.09
Total amount transferred to RJS Oil Revenues Dedicated Account	R\$ 4,015,086,157.15

Statutory Oil Revenue Allocations by RJS	Amount
PASEP (Program for the Formation of Assets of Public Servants)	(R\$ 40,150,861.48)
FECAM (State Fund for Environmental Conservation and Urban Development) ¹	R\$ 0.00
Municipalities within RJS	(R\$ 182,152,910.56)
Brazilian Federal Government (Assignment Agreement of October 29, 1999)	R\$ 0.00
Conta B (State Decree N° 43,783 of September 12, 2012)	R\$ 0.00
Total RJS Oil Revenue Allocations	(R\$ 222,303,772.04)

Assigned Oil Revenues and Assigned Oil Revenue Rights	Amount
RJS Oil Revenues and RJS Oil Revenue Rights	R\$ 4,015,086,157.15
RJS Oil Revenue Allocations	(R\$ 222,303,772.04)
Net amount transferred to Collections Account	R\$ 3,792,782,385.11

1) According to the Amendment to the State of Rio de Janeiro Constitution N° 70 of December 12, 2017 and the State Law N° 178 of December 20, 2017 (the “FECAM Subordination Legislation”), amounts related to FECAM Allocation are not deducted from Royalties and Special Participations, but instead are allocated according to priority fifteenth of the Revenue Account Waterfall (Section 4.3.(o) of the Indenture).



Section (B) – Detailed Allocation of Funds

In accordance with the Collections Account Waterfall and the Revenue Account Waterfall, the full amount of funds available for transfer on each Reais Transfer Date, was allocated as per below:

Allocation of Funds	Amount
Taxation Expenses Transfer Amount	R\$ 54,191,160.65
Servicer Fee Transfer Amount	R\$ 48,000.00
Bond Administrator Fees Transfer Amount	R\$ 48,000.00
Excess Companhia Securitizadora Expenses Transfer Amount	R\$ 160,434.42
Issuer Expenses Transfer Amount	R\$ 244,558.81
Series 2014-1 Senior Interest Transfer Amount	R\$ 111,885,844.50
Series 2014-2 Senior Interest Transfer Amount	R\$ 19,346,863.36
Series 2014-3 Senior Interest Transfer Amount	R\$ 74,504,223.94
Series 2018-1 Senior Interest Transfer Amount	R\$ 45,753,540.00
Series 2014-1 Senior Scheduled Principal Transfer Amount	R\$ 111,043,690.42
Series 2014-2 Senior Scheduled Principal Transfer Amount	R\$ 30,666,131.33
Series 2014-3 Senior Scheduled Principal Transfer Amount	R\$ 31,014,332.59
Liquidity Reserve Account Transfer Amount	R\$ 297,407,727.19
Special Interest Liquidity Reserve Account Transfer Amount	R\$ 34,856,760.76
To the holder of the Sponsor Note and/or RJS	R\$ 2,981,611,117.14
Total allocation	R\$ 3,792,782,385.11



Section (C) – Debt Service Coverage Ratio (DSCR) Calculation

(i) Annualized Average Debt Service Coverage Ratio (AADSCR)

$$AADSCR = \frac{DSCR_q + DSCR_{(q-1)} + DSCR_{(q-2)} + DSCR_{(q-3)}}{n}$$

$DSCR_q$ = Debt Service Coverage Ratio for the current Quarterly Reporting Period

$DSCR_{(q-1)}$ = Debt Service Coverage Ratio for the preceding Quarterly Reporting Period

$DSCR_{(q-2)}$ = Debt Service Coverage Ratio for the second preceding Quarterly Reporting Period

$DSCR_{(q-3)}$ = Debt Service Coverage Ratio for the third preceding Quarterly Reporting Period

n = Number of total preceding Quarterly Reports already produced (up to four)

$$\text{Debt Service Coverage Ratio} = \frac{\text{Collections} - [(a) + (b) + (c)]}{\text{Quarterly Debt Service}}$$

$$\text{Quarterly Debt Service} = (d) + (e)$$

- (a) Amounts allocated with respect to priority (a) of the Collections Account Waterfall
- (b) Amounts allocated with respect to priority (b) of the Collections Account Waterfall
- (c) Amounts paid in respect of priority (a) of the Revenue Account Waterfall
- (d) The sum of Scheduled Principal Amounts for the next Scheduled Payment Date
- (e) The sum of the Class Interest Amounts to be paid on the next Scheduled Payment Date

Supporting Calculations:

1) Quarterly Debt Service (QDS)

(i) Scheduled Principal Amount for the Series 2014-1 Notes = US\$ 30,968,810.33

(ii) Scheduled Principal Amount for the Series 2014-2 Notes = US\$ 8,398,272.27

(iii) Scheduled Principal Amount for the Series 2014-3 Notes = US\$ 8,649,541.28

(iv) Scheduled Principal Amount for the Series 2018-1 Notes = US\$ 0.00

(v) Class Interest Amount for the Series 2014-1 Notes = US\$ 30,078,457.04

(vi) Class Interest Amount for the Series 2014-2 Notes = US\$ 4,961,879.24

(vii) Class Interest Amount for the Series 2014-3 Notes = US\$ 20,029,094.02

(viii) Class Interest Amount for the Series 2018-1 Notes = US\$ 12,300,000.00

Scheduled Principal Amount = US\$ 30,968,810.33 + US\$ 8,398,272.27 + US\$ 8,649,541.28 + US\$ 0.00 = **US\$ 48,016,623.88**

Class Interest Amount = US\$ 30,078,457.04 + US\$ 4,961,879.24 + US\$ 20,029,094.02 + US\$ 12,300,000.00 = **US\$ 67,369,430.30**

QDS = US\$ 48,016,623.88 + US\$ 67,369,430.30 = **US\$ 115,386,054.18**

2) Priority (b) of the Collections Account Waterfall

(i) Servicer Fee Transfer Amount = US\$ 12,310.53

(ii) Bond Administrator Fees Transfer Amount = US\$ 12,310.53

(iii) Brazilian Collateral Agent Fees Transfer Amount = US\$ 0.00

(iv) Excess Companhia Securitizadora Expenses Transfer Amount = US\$ 41,146.53

Priority (b) = US\$ 12,310.53 + US\$ 12,310.53 + US\$ 0.00 + US\$ 41,146.53 = **US\$ 65,767.59**

3) Debt Service Coverage Ratio (DSCR)

(i) Collections received during such Quarterly Reporting Period = US\$ 972,732,780.67

(ii) Taxation Expenses Transfer Amount = US\$ 13,898,376.72

(iii) Issuer Expenses Transfer Amount = US\$ 63,221.00

$$DSCR = \frac{US\$ 972,732,780.67 - (US\$ 13,898,376.72 + US\$ 65,767.59 + US\$ 63,221.00)}{US\$ 115,386,054.18}$$

$$DSCR = \frac{US\$ 958,705,415.36}{US\$ 115,386,054.18} = \mathbf{8.3}$$



(i) Annualized Average Debt Service Coverage Ratio (AADSCR) (cont.)

4) Annualized Average Debt Service Coverage Ratio (AADSCR)

$$AADSCR = \frac{8.3 + 7.3 + 6.1 + 4.1}{4} = 6.4$$

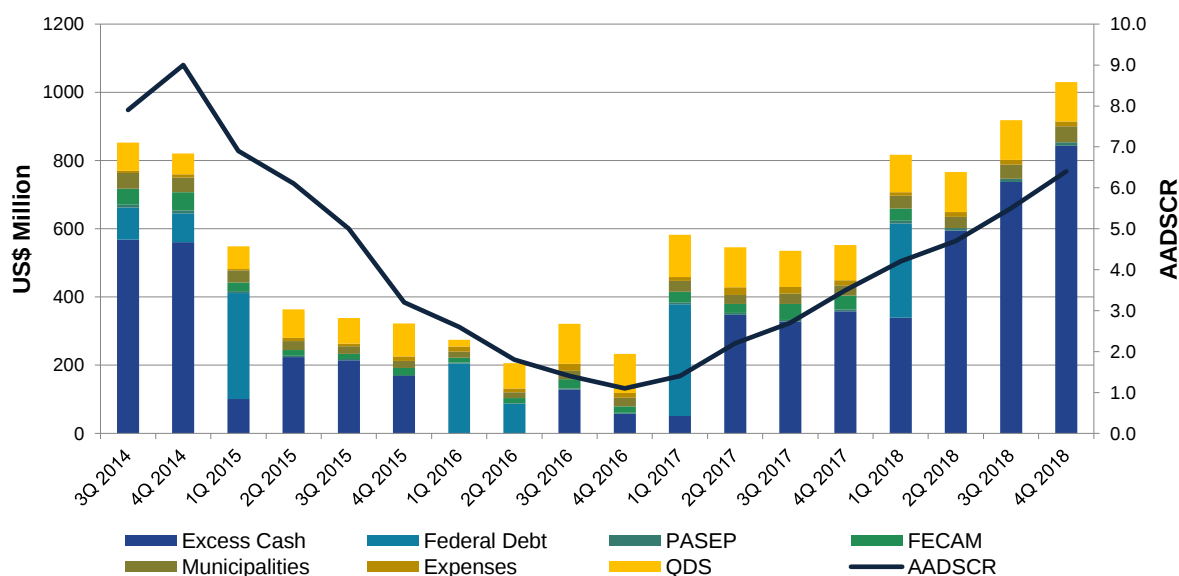
5) Historical AADSCR

- (a) Royalty for each Field
- (b) Special Participation for each Field
- (c) Oil Hedge Expected Payout
- (d) Federal Debt Allocation
- (e) PASEP Allocation
- (f) FECAM Allocation
- (g) Municipalities Allocation
- (h) Expected Expenses

Amounts in (US\$ million)

Year	Quarter	(a) + (b)	(c)	(d)	(e)	(f)	(g)	(h)	QDS	AADSCR	
										Quarter	Annual
2014	3Q	852.43	0.00	93.28	8.52	47.73	45.84	6.33	82.41	7.9	7.9
	4Q	821.10	0.00	84.42	8.21	52.90	43.97	9.18	61.26	10.2	9.0
2015	1Q	548.20	0.00	310.92	5.48	25.34	35.87	3.60	66.08	2.5	6.9
	2Q	363.55	0.00	0.00	3.64	17.02	26.20	9.03	83.86	3.7	6.1
	3Q	338.70	0.00	0.00	3.39	15.41	22.05	7.26	75.87	3.8	5.0
	4Q	322.16	0.00	0.00	3.22	20.42	20.49	13.08	96.84	2.7	3.2
2016	1Q	274.70	0.00	204.87	2.75	14.54	17.95	14.50	122.64	0.2	2.6
	2Q	206.33	0.00	86.45	2.06	15.36	16.73	11.29	124.59	0.6	1.8
	3Q	321.62	0.00	0.00	3.22	27.24	24.72	20.00	117.86	2.1	1.4
	4Q	233.01	0.00	0.00	2.33	19.13	25.29	14.40	114.21	1.5	1.1
2017	1Q	581.88	0.00	327.59	5.82	31.18	31.93	10.94	123.45	1.4	1.4
	2Q	545.54	0.00	0.00	5.46	25.94	26.50	22.84	117.12	4.0	2.2
	3Q	535.77	0.00	0.00	5.36	47.09	29.62	19.57	106.68	4.1	2.7
	4Q	552.37	0.00	0.00	5.52	40.30	29.90	15.38	103.10	4.5	3.5
2018	1Q	816.66	0.00	276.03	8.17	35.94	37.44	10.20	109.72	4.1	4.2
	2Q	765.95	0.00	0.00	7.66	0.00	33.02	13.91	117.00	6.1	4.7
	3Q	918.27	0.00	0.00	9.18	0.00	40.76	14.09	116.76	7.3	5.5
	4Q	1029.75	0.00	0.00	10.30	0.00	46.72	14.03	115.39	8.3	6.4

Historical Oil Revenues and AADSCR



Note: The amount described as "Excess Cash" in this graph means the available cash after mandatory deductions, expenses and quarterly debt service. This amount shall be used to fund other accounts, according to the waterfall set forth in the Indenture.



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR)

$$FLDSCR = \frac{\{[\sum(a) + \sum(b) + \sum(c)] - [(d) + (e) + (f) + (g) + (h)]\}}{\text{Forward Quarterly Debt Service}}$$

- (a) Forward Royalty for each Field
- (b) Forward Special Participation for each Field
- (c) Forward Oil Hedge Expected Payout
- (d) Forward Federal Debt Allocation
- (e) Forward PASEP Allocation
- (f) Forward FECAM Allocation ¹
- (g) Forward Municipalities Allocation
- (h) Forward Expected Expenses

Amounts in (US\$ million)

Year	Quarter	(a) + (b)	(c)	(d)	(e)	(f)	(g)	(h)	FQDS	FLDSCR	
										Quarter	Annual
2019	1Q	326.26	0.00	175.34	3.26	0.00	23.19	11.40	130.96	0.9	1.9
	2Q	313.67	0.00	0.00	3.14	0.00	23.14	11.18	129.26	2.1	2.1
	3Q	317.55	0.00	0.00	3.18	0.00	23.41	10.84	127.55	2.2	2.1
	4Q	320.18	0.00	0.00	3.20	0.00	23.59	10.60	125.90	2.2	2.1
2020	1Q	325.66	0.00	46.08	3.26	0.00	24.22	10.36	134.09	1.8	2.0
	2Q	324.91	0.00	0.00	3.25	0.00	25.46	10.10	138.15	2.1	2.1
	3Q	326.46	0.00	0.00	3.26	0.00	25.58	9.78	136.12	2.1	2.0
	4Q	327.62	0.00	0.00	3.28	0.00	25.67	9.48	134.05	2.2	2.0
2021	1Q	325.00	0.00	2.09	3.25	0.00	25.29	9.18	141.82	2.0	1.9
	2Q	303.82	0.00	0.00	3.04	0.00	24.43	8.85	143.21	1.9	1.9
	3Q	303.82	0.00	0.00	3.04	0.00	24.43	8.48	140.85	1.9	1.9
	4Q	303.82	0.00	0.00	3.04	0.00	24.43	8.12	138.47	1.9	1.9
2022	1Q	306.68	0.00	0.00	3.07	0.00	24.79	7.77	149.88	1.8	1.9
	2Q	309.49	0.00	0.00	3.09	0.00	25.52	7.37	142.43	1.9	1.9
	3Q	309.49	0.00	0.00	3.09	0.00	25.52	6.81	140.05	2.0	1.9
	4Q	309.49	0.00	0.00	3.09	0.00	25.52	6.38	137.68	2.0	1.9
2023	1Q	312.77	0.00	0.00	3.13	0.00	25.94	5.96	149.08	1.9	1.9
	2Q	319.60	0.00	0.00	3.20	0.00	26.78	5.49	150.04	1.9	2.0
	3Q	319.60	0.00	0.00	3.20	0.00	26.78	4.97	147.27	1.9	2.0
	4Q	319.60	0.00	0.00	3.20	0.00	26.78	4.47	144.50	2.0	2.6
2024	1Q	321.10	0.00	0.00	3.21	0.00	26.98	3.97	138.31	2.1	3.2
	2Q	325.41	0.00	0.00	3.25	0.00	27.37	3.50	139.27	2.1	3.9
	3Q	325.41	0.00	0.00	3.25	0.00	27.37	2.99	66.82	4.4	4.4
	4Q	325.41	0.00	0.00	3.25	0.00	27.37	2.78	65.66	4.4	4.4
2025	1Q	326.59	0.00	0.00	3.27	0.00	27.52	2.57	64.50	4.5	4.4
	2Q	322.94	0.00	0.00	3.23	0.00	27.83	2.37	67.00	4.3	4.4
	3Q	322.94	0.00	0.00	3.23	0.00	27.83	2.13	65.76	4.4	4.3
	4Q	322.94	0.00	0.00	3.23	0.00	27.83	1.91	64.53	4.5	4.2
2026	1Q	320.42	0.00	0.00	3.20	0.00	27.52	1.69	67.62	4.3	4.2
	2Q	315.04	0.00	0.00	3.15	0.00	26.90	1.46	69.93	4.1	5.4
	3Q	315.04	0.00	0.00	3.15	0.00	26.90	1.19	68.52	4.1	6.3
	4Q	315.04	0.00	0.00	3.15	0.00	26.90	0.94	67.10	4.2	7.2
2027	1Q	309.60	0.00	0.00	3.10	0.00	26.21	0.68	31.09	9.0	8.1
	2Q	288.18	0.00	0.00	2.88	0.00	24.84	0.59	33.69	7.7	7.9
	3Q	288.18	0.00	0.00	2.88	0.00	24.84	0.46	33.06	7.9	8.0
	4Q	288.18	0.00	0.00	2.88	0.00	24.84	0.35	32.42	8.0	8.0
2028	1Q	282.83	0.00	0.00	2.83	0.00	24.17	0.23	31.78	8.0	8.0

Minimum Average Forward-Looking Debt Service Coverage Ratio: 1.9

Please see Appendix 1 for considerations of minimum FLDSCR.



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

Supporting Calculations:

1) Forward Royalty (FR)

$$FR = (a) \times (b) \times (c)$$

$$FRGR = [(d) \times (e)] + [(f) \times (g)]$$

$$FOP = (h) \times (i)$$

$$FOPE = 365 \times 0.25 \times FOP (\$90 \text{ Scenario}) - \text{Table 6}$$

$$FOPAF = \frac{AOP_q + AOP_{(q-1)} + AOP_{(q-2)} + AOP_{(q-3)}}{FOPE_q + FOPE_{(q-1)} + FOPE_{(q-2)} + FOPE_{(q-3)}}$$

$$FOPX = [1 - (n)] \times [(o) \text{ or } (p)]$$

$$FGP = (q) \times (r)$$

$$FGPE = 365 \times 0.25 \times FGP (\$90 \text{ Scenario}) - \text{Table 7}$$

$$FGPAF = \frac{AGP_q + AGP_{(q-1)} + AGP_{(q-2)} + AGP_{(q-3)}}{FGPE_q + FGPE_{(q-1)} + FGPE_{(q-2)} + FGPE_{(q-3)}}$$

- (a) Forward Royalty Gross Revenue (FRGR) for each Field
- (b) Forward Field Royalty Rate (FFRR) for each Field – Table 13
- (c) Forward RJS Royalty Rate – Table 16 (Juridical Condition 1)
- (d) Forward Oil Production (FOP)
- (e) Forward Oil Price (FOPX)
- (f) Forward Gas Production (FGP)
- (g) Forward Gas Price (\$70 Scenario) (FGPX) – Table 9
- (h) Forward Oil Production Estimates (FOPE)
- (i) Forward Oil Production Adjustment Factor (FOPAF)
- (j) AOP_q = Actual Oil Production for the current Quarterly Reporting Period
- (k) $AOP_{(q-1)}$ = Actual Oil Production for the preceding Quarterly Reporting Period
- (l) $AOP_{(q-2)}$ = Actual Oil Production for the second preceding Quarterly Reporting Period
- (m) $AOP_{(q-3)}$ = Actual Oil Production for the third preceding Quarterly Reporting Period
- (n) Brent Discount – Table 12
- (o) Forward Estimated Oil Price
- (p) Brent Futures Contract
- (q) Forward Gas Production Estimates (FGPE)
- (r) Forward Gas Production Adjustment Factor (FGPAF)
- (s) AGP_q = Actual Gas Production for the current Quarterly Reporting Period
- (t) $AGP_{(q-1)}$ = Actual Gas Production for the preceding Quarterly Reporting Period
- (u) $AGP_{(q-2)}$ = Actual Gas Production for the second preceding Quarterly Reporting Period
- (v) $AGP_{(q-3)}$ = Actual Gas Production for the third preceding Quarterly Reporting Period



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

Actual Oil Production (AOP)

Grouping Field	Actual Oil Production ('000 bbl)							
	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3
Albacora	5978.67	5804.53	5020.57	4241.06	3287.19	3857.52	3188.16	1263.53
Albacora Leste	5269.52	4744.98	4947.90	4485.77	3837.96	3651.18	2557.91	3093.57
Atlanta	0.00	0.00	0.00	0.00	0.00	0.00	593.74	1185.18
Barracuda Area	4618.84	4824.87	3591.96	4736.13	5293.12	5022.74	5341.59	5872.99
Berbigao	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bijupira	637.01	924.45	969.62	714.36	815.05	0.00	0.00	0.00
BM-C-33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Buzios	1687.89	696.20	21.30	0.00	0.00	0.00	2263.45	2718.89
Campos Basin Central Pole	1651.45	1030.07	1368.76	1346.80	1247.52	1273.57	1169.52	1115.44
Campos Basin North East Pole	1350.80	1413.75	1460.61	1379.78	1431.38	1357.35	1227.31	912.69
Campos Basin North Pole	1321.94	1279.29	1237.65	1110.34	931.53	1069.51	777.71	722.88
Campos Basin South Pole	2225.41	1995.99	1862.69	1872.13	1747.64	940.63	1624.97	1890.61
Caratinga Area	2923.13	2653.70	2621.59	2816.32	2644.54	2095.65	1832.02	1447.45
Cherne	799.13	889.08	758.44	632.66	774.97	749.32	796.06	839.83
Espadarte Area	593.14	372.04	196.55	196.30	170.61	134.26	141.66	0.72
Frade	1974.92	1865.55	1866.72	1679.16	1627.01	1574.38	1546.01	1524.22
Iara Entorno	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Itapu	0.00	979.56	2600.46	2686.86	1847.72	0.00	0.00	0.00
Libra	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lula-Iracema	61450.65	61744.65	64019.21	69332.55	75162.99	75705.02	79026.22	77645.31
Marlim	14570.75	14180.30	12211.30	12010.42	13210.37	12738.68	11706.43	10960.01
Marlim Leste Area	6979.52	6342.82	6542.47	6131.24	5420.59	6641.78	6045.13	6577.30
Marlim Sul	16463.07	13964.94	15211.32	15532.53	15443.05	14289.25	13772.87	13245.08
Maromba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oeste de Atapu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oliva	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Papa-Terra	1282.03	1157.82	917.55	813.77	630.91	330.24	378.11	770.66
Peregrino	5521.34	5555.14	6352.04	6765.39	5728.58	5197.10	5824.26	6191.67
Polvo	751.43	739.24	731.63	704.07	677.60	553.83	742.31	927.48
Roncador	24619.79	23037.64	21754.94	22444.27	22017.59	19862.19	19105.01	16209.63
Salema	269.15	339.75	353.71	348.38	321.31	0.00	0.00	0.00
Sepia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sepia Leste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sul de Lula	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sururu	0.00	0.00	10.63	7.15	1.50	872.96	1476.20	338.79
Tambau	0.50	1.33	1.75	0.58	0.94	4.39	2.15	2.41
Tartaruga Verde	1327.75	1220.60	1143.66	807.16	556.42	0.00	102.51	2337.21
Tubarao Azul	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tubarao Martelo	767.98	722.55	706.31	512.71	500.79	691.48	615.67	543.53
Urugua	1032.30	1088.40	1056.74	957.61	908.39	789.77	757.11	689.26
Voador	265.07	197.83	233.88	218.53	216.33	230.91	180.67	55.72

Source – ANP (<http://www.anp.gov.br/wwwanp/royalties-e-outras-participacoes/royalties>)



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

Forward Oil Production Adjustment Factor (FOPAF)

Grouping Field	$\sum_{x=0}^3 AOP_{(q-x)}$	$\sum_{x=0}^3 FOPE_{(q-x)}$	Adjustment Factor ^{1 2} $\frac{(A)}{(B)}$
	(A)	(B)	
Albacora	11596.39	23807.13	0.48709763
Albacora Leste	13140.62	16963.38	0.77464667
Atlanta	1778.92	3011.25	0.59075764
Barracuda Area	21530.44	18049.25	1.00000000
Berbigao	0.00	8212.50	0.00000000
Bijupira	815.05	4991.38	0.16329136
BM-C-33	0.00	0.00	1.00000000
Buzios	4982.34	16607.50	0.30000555
Campos Basin Central Pole	4806.04	4316.13	1.00000000
Campos Basin North East Pole	4928.74	5392.88	0.91393528
Campos Basin North Pole	3501.64	7573.75	0.46233878
Campos Basin South Pole	6203.85	7044.50	0.88066589
Caratinga Area	8019.66	9718.13	0.82522751
Cherne	3160.18	0.00	1.00000000
Espadarte Area	447.26	866.88	0.51593970
Frade	6271.62	12984.88	0.48299459
Iara Entorno	0.00	2737.50	0.00000000
Itapu	1847.72	2025.75	0.91211629
Libra	0.00	6925.88	0.00000000
Lula-Iracema	307539.54	309556.50	0.99348436
Marlim	48615.50	50078.00	0.97079556
Marlim Leste Area	24684.80	31134.50	0.79284406
Marlim Sul	56750.25	53883.13	1.00000000
Maromba	0.00	0.00	1.00000000
Oeste de Atapu	0.00	0.00	1.00000000
Oliva	0.00	0.00	1.00000000
Papa-Terra	2109.92	6022.50	0.35033896
Peregrino	22941.61	23433.00	0.97902980
Polvo	2901.22	2326.88	1.00000000
Roncador	77194.42	93157.13	0.82864750
Salema	321.31	1460.00	0.22007693
Sepia	0.00	0.00	1.00000000
Sepia Leste	0.00	0.00	1.00000000
Sul de Lula	0.00	0.00	1.00000000
Sururu	2689.45	0.00	1.00000000
Tambau	9.89	0.00	1.00000000
Tartaruga Verde	2996.15	8020.88	0.37354376
Tubarao Azul	0.00	0.00	1.00000000
Tubarao Martelo	2351.48	2363.38	0.99496754
Urugua	3144.54	3878.13	0.81083903
Voador	683.63	766.50	0.89189148

Note 1: If $\frac{(A)}{(B)} > 1$, then, FOPAF equals 1.

Note 2: According to the definition of "Forward Oil Production Adjustment Factor" in Indenture Appendix, "if the most recent Independent Consultant's Report was dated as of a date, and delivered in accordance with the requirements of the Indenture and made available to Instrumentholders pursuant to Section 2.13 of the Indenture within, not more than six months prior to such time of determination, the FOPAF shall be 1.

Note 3: Libra field future oil production forecast is not considered for the calculation of FLDSCR.



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

Minimum Oil Price between Forward Estimated Oil Price and Brent Futures Contract:

Quarter	Future Contract Maturity ¹	Forward Estimated Oil Price		Brent Futures Contract	Minimum
		(Wood Mackenzie)			
		Base Case	Low Case		
		Table 4	Table 8		
2018 Q4	Nov 18 ²	\$ 61.00	\$ 61.00	\$ 82.72	\$ 61.00
2019 Q1	Feb 19	\$ 58.00	\$ 58.00	\$ 53.82	\$ 53.82
2019 Q2	May 19	\$ 58.00	\$ 58.00	\$ 54.57	\$ 54.57
2019 Q3	Aug 19	\$ 58.00	\$ 58.00	\$ 55.13	\$ 55.13
2019 Q4	Nov 19	\$ 58.00	\$ 58.00	\$ 55.29	\$ 55.29
2020 Q1	Feb 20	\$ 57.00	\$ 57.00	\$ 55.52	\$ 55.52
2020 Q2	May 20	\$ 57.00	\$ 57.00	\$ 55.82	\$ 55.82
2020 Q3	Aug 20	\$ 57.00	\$ 57.00	\$ 56.04	\$ 56.04
2020 Q4	Nov 20	\$ 57.00	\$ 57.00	\$ 56.22	\$ 56.22
2021 Q1	Feb 21	\$ 68.98	\$ 53.06	\$ 56.42	\$ 53.06
2021 Q2	May 21	\$ 68.98	\$ 53.06	\$ 56.75	\$ 53.06
2021 Q3	Aug 21	\$ 68.98	\$ 53.06	\$ 57.00	\$ 53.06
2021 Q4	Nov 21	\$ 68.98	\$ 53.06	\$ 57.21	\$ 53.06
2022 Q1	Feb 22	\$ 70.36	\$ 54.12	\$ 57.47	\$ 54.12
2022 Q2	May 22	\$ 70.36	\$ 54.12	\$ 57.74	\$ 54.12
2022 Q3	Aug 22	\$ 70.36	\$ 54.12	\$ 57.99	\$ 54.12
2022 Q4	Nov 22	\$ 70.36	\$ 54.12	\$ 58.23	\$ 54.12
2023 Q1	Feb 23	\$ 71.77	\$ 55.20	\$ 58.47	\$ 55.20
2023 Q2	May 23	\$ 71.77	\$ 55.20	\$ 58.71	\$ 55.20
2023 Q3	Aug 23	\$ 71.77	\$ 55.20	\$ 58.95	\$ 55.20
2023 Q4	Nov 23	\$ 71.77	\$ 55.20	\$ 59.19	\$ 55.20
2024 Q1	Feb 24	\$ 73.20	\$ 56.31	\$ 59.39	\$ 56.31
2024 Q2	May 24	\$ 73.20	\$ 56.31	\$ 59.57	\$ 56.31
2024 Q3	Aug 24	\$ 73.20	\$ 56.31	\$ 59.75	\$ 56.31
2024 Q4	Nov 24	\$ 73.20	\$ 56.31	\$ 59.93	\$ 56.31
2025 Q1	Feb 25	\$ 74.67	\$ 57.43	\$ 60.06	\$ 57.43
2025 Q2	May 25	\$ 74.67	\$ 57.43	\$ 60.20	\$ 57.43
2025 Q3	Aug 25	\$ 74.67	\$ 57.43	\$ 60.35	\$ 57.43
2025 Q4	Nov 25	\$ 74.67	\$ 57.43	\$ 60.50	\$ 57.43
2026 Q1	Feb 26	\$ 76.16	\$ 58.58	\$ 60.65	\$ 58.58
2026 Q2	May 26	\$ 76.16	\$ 58.58	-	\$ 58.58
2026 Q3	Aug 26	\$ 76.16	\$ 58.58	-	\$ 58.58
2026 Q4	Nov 26	\$ 76.16	\$ 58.58	-	\$ 58.58
2027 Q1	Feb 27	\$ 77.68	\$ 59.75	-	\$ 59.75
2027 Q2	May 27	\$ 77.68	\$ 59.75	-	\$ 59.75
2027 Q3	Aug 27	\$ 77.68	\$ 59.75	-	\$ 59.75
2027 Q4	Nov 27	\$ 77.68	\$ 59.75	-	\$ 59.75
2028 Q1	Feb 28	\$ 79.24	\$ 60.95	-	\$ 60.95
2028 Q2	May 28	\$ 79.24	\$ 60.95	-	\$ 60.95
2028 Q3	Aug 28	\$ 79.24	\$ 60.95	-	\$ 60.95
2028 Q4	Nov 28	\$ 79.24	\$ 60.95	-	\$ 60.95
2029 Q1	Feb 29	\$ 80.82	\$ 62.17	-	\$ 62.17

Note 1: Source – Bloomberg (COM8 Comdty CT) as of Dec 21, 2018

Note 2: Nov 18 last price, as of Sep 28, 2018 (Bloomberg COX8 Comdty)



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

Actual Gas Production (AGP)

Grouping Field	Actual Gas Production (MMcf)							
	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	2018 Q1	2018 Q2	2018 Q3
Albacora	3131.72	2971.58	2841.08	2553.06	2156.77	2164.72	2049.48	797.42
Albacora Leste	2875.21	2423.83	2423.21	2384.51	2414.53	2429.45	1562.41	1671.71
Atlanta	0.00	0.00	0.00	0.00	0.00	0.00	143.26	275.10
Barracuda Area	2634.02	2768.56	1883.20	2227.67	2621.67	2479.04	2815.10	2828.10
Berbigao	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bijupira	300.01	442.07	415.65	278.83	302.87	0.00	0.00	0.00
BM-C-33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Buzios	2130.82	896.57	21.53	0.00	0.00	0.00	2418.83	2774.75
Campos Basin Central Pole	716.44	432.79	518.90	636.25	524.02	533.14	435.72	423.03
Campos Basin North East Pole	308.77	252.11	260.97	305.45	312.39	308.29	236.74	231.01
Campos Basin North Pole	696.62	1477.24	1159.29	366.72	653.20	584.54	395.94	576.01
Campos Basin South Pole	2054.69	1898.16	1315.31	1313.72	1291.80	563.76	862.00	798.44
Caratinga Area	1639.79	1432.15	1352.75	1468.19	1355.77	1173.14	1088.46	760.53
Cherne	307.23	407.28	431.03	249.17	296.66	391.42	348.67	435.27
Espadarte Area	69.57	98.88	29.58	41.51	37.66	60.50	37.28	1.37
Frade	783.40	742.03	756.37	688.19	843.48	697.81	653.05	667.14
Iara Entorno	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Itapu	0.00	450.32	1219.74	1252.80	804.98	0.00	0.00	0.00
Libra	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lula-Iracema	50094.80	54658.36	61776.03	61323.86	65809.16	63690.49	69203.69	55874.01
Marlim	7423.09	7051.01	6065.74	5652.71	6492.16	6204.34	5637.94	5370.51
Marlim Leste Area	3808.63	3304.87	3387.96	3405.89	3091.30	3649.74	3447.52	3215.37
Marlim Sul	10741.83	10046.01	10429.25	11321.56	11142.46	10310.11	9921.74	9527.90
Maromba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oeste de Atapu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Oliva	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Papa-Terra	282.48	238.45	170.17	185.74	122.66	32.70	77.54	186.49
Peregrino	260.95	277.78	307.55	347.39	349.39	330.53	363.04	376.30
Polvo	75.03	69.64	68.38	66.71	67.63	52.65	73.52	76.26
Roncador	20691.75	19214.79	19785.80	20328.32	20750.30	16850.24	16260.07	13231.07
Salema	257.40	267.53	261.91	244.95	230.26	0.00	0.00	0.00
Sepia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sepia Leste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sul de Lula	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sururu	0.00	0.00	9.98	8.28	1.79	939.37	1572.02	360.07
Tambau	117.56	253.05	292.45	76.27	121.38	625.89	327.26	315.84
Tartaruga Verde	467.29	426.33	409.29	310.52	215.76	0.00	73.58	1084.10
Tubarao Azul	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tubarao Martelo	49.74	46.19	42.60	26.07	24.41	42.26	32.78	31.65
Urugua	4886.78	4944.44	5294.64	3959.61	3425.88	5358.00	3681.22	1754.01
Voador	255.14	214.66	264.12	246.56	246.51	242.37	193.41	66.96

Source – ANP (<http://www.anp.gov.br/wwwanp/royalties-e-outras-participacoes/royalties>)



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

Forward Gas Production Adjustment Factor (FGPAF)

Grouping Field	$\sum_{x=0}^3 AGP_{(q-x)}$	$\sum_{x=0}^3 FGPE_{(q-x)}$	Adjustment Factor ^{1 2} $\frac{(A)}{(B)}$
	(A)	(B)	
Albacora	7168.39	9882.38	0.72537076
Albacora Leste	8078.10	8924.25	0.90518556
Atlanta	418.36	766.50	0.54580799
Barracuda Area	10743.91	8924.25	1.00000000
Berbigao	0.00	4352.63	0.00000000
Bijupira	302.87	2244.75	0.13492561
BM-C-33	0.00	0.00	1.00000000
Buzios	5193.58	8906.00	0.58315495
Campos Basin Central Pole	1915.92	693.50	1.00000000
Campos Basin North East Pole	1088.42	1186.25	0.91752799
Campos Basin North Pole	2209.68	5748.75	0.38437620
Campos Basin South Pole	3516.00	6214.13	0.56580826
Caratinga Area	4377.89	4881.88	0.89676478
Cherne	1472.02	0.00	1.00000000
Espadarte Area	136.81	191.63	0.71392700
Frade	2861.48	5301.63	0.53973634
Iara Entorno	0.00	0.00	1.00000000
Itapu	804.98	930.75	0.86487743
Libra	0.00	1761.13	0.00000000
Lula-Iracema	254577.35	231829.75	1.00000000
Marlim	23704.95	24710.50	0.95930665
Marlim Leste Area	13403.94	12035.88	1.00000000
Marlim Sul	40902.20	49147.25	0.83223776
Maromba	0.00	0.00	1.00000000
Oeste de Atapu	0.00	0.00	1.00000000
Oliva	0.00	0.00	1.00000000
Papa-Terra	419.39	1158.88	0.36189550
Peregrino	1419.25	1222.75	1.00000000
Polvo	270.07	209.88	1.00000000
Roncador	67091.68	78611.88	0.85345474
Salema	230.26	1131.50	0.20350362
Sepia	0.00	0.00	1.00000000
Sepia Leste	0.00	0.00	1.00000000
Sul de Lula	0.00	0.00	1.00000000
Sururu	2873.24	0.00	1.00000000
Tambau	1390.36	866.88	1.00000000
Tartaruga Verde	1373.44	4580.75	0.29982891
Tubarao Azul	0.00	0.00	1.00000000
Tubarao Martelo	131.09	200.75	0.65302306
Urugua	14219.11	15357.38	0.92588179
Voador	749.25	848.63	0.88290358

Note 1: If $\frac{(A)}{(B)} > 1$, then, FGPAF equals 1.

Note 2: According to the definition of "Forward Gas Production Adjustment Factor" in Indenture Appendix, "if the most recent Independent Consultant's Report was dated as of a date, and delivered in accordance with the requirements of the Indenture and made available to Instrumentholders pursuant to Section 2.13 of the Indenture within, not more than six months prior to such time of determination, the FGPAF shall be 1.

Note 3: Libra field future oil production forecast is not considered for the calculation of FLDSCR.



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

2) Forward Special Participations (FSP)

$$FSP = (a) \times (b) \times (c)$$

$$FNR = (d) \times (e)$$

$$FSPRA = (f) + \left\{ (g) \times \left[\left(\frac{(h)}{1 - (i)} \right) - (j) \right] \right\} + \{ (k) \times [(l) - (m)] \} + \{ (n) \times [(o) - (p)] \} + \{ (q) \times [(r) - (s)] \}$$

$$OPXSPRA = (t) \times \left\{ \frac{[(f) - (u)]}{[(j) - (v)]} \right\}$$

$$GPXSPRA = (w) \times \left\{ \frac{[(f) - (u)]}{[(m) - (l)]} \right\}$$

$$OPSPRA = (t) \times \left\{ \frac{[(f) - (x)]}{[(p) - (y)]} \right\}$$

$$GPSPRA = (w) \times \left\{ \frac{[(f) - (x)]}{[(s) - (z)]} \right\}$$

$$OGRR = \frac{[(p) \times (j)]}{(aa)}$$

$$GGRR = \frac{[(s) \times (m)]}{(aa)}$$

$$FRGR\$90 = [(o) \times (j)] + [(r) \times (m)]$$

$$FTP = [0.178 \times (r)] + (o)$$

- (a) Forward Net Revenue (FNR) for each Field
- (b) Forward Special Participation Rate (FSPR) for each Field
- (c) Forward RJS Special Participation Rate – Table 16 (Juridical Condition 1)
- (d) Forward Royalty Gross Revenue (FRGR) for each Field
- (e) Forward Special Participation Ratio (FSPRA)
- (f) Forward Special Participation Ratio (\$90 Scenario) – Table 1
- (g) Oil Price SP Ratio Adjustment (OPXSPRA)
- (h) Forward Oil Price (FOPX)
- (i) Brent Discount – Table 12
- (j) Forward Oil Price (\$90 Scenario) – Table 4
- (k) Gas Price SP Ratio Adjustment (GPXSPRA)
- (l) Forward Gas Price (\$70 Scenario) – Table 9
- (m) Forward Gas Price (\$90 Scenario) – Table 5
- (n) Oil Production SP Ratio Adjustment (OPSPRA)
- (o) Forward Oil Production (FOP)
- (p) Forward Oil Production (\$90 Scenario) – Table 6 (Appendix 2)
- (q) Gas Production SP Ratio Adjustment (GPSPRA)
- (r) Forward Gas Production (FGP)
- (s) Forward Gas Production (\$90 Scenario) – Table 7 (Appendix 3)
- (t) Oil Gross Revenue Ratio (OGRR)
- (u) Forward Special Participation Ratio (\$70 Scenario) – Table 2
- (v) Forward Oil Price (\$70 Scenario) – Table 8
- (w) Gas Gross Revenue Ratio (GGRR)
- (x) Forward Special Participation Ratio (Downside Scenario) – Table 3
- (y) Forward Oil Production (Downside Scenario) – Table 10
- (z) Forward Gas Production (Downside Scenario) – Table 11
- (aa) Forward Royalty Gross Revenue – under \$90 Scenario (FRGR\$90)
- (bb) Forward Total Production



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

3) Forward Oil Hedge Expected Payout (FOHEP)

$$FOHEP = \sum (\text{Oil Hedge Agreement Expected Net Payout})$$

No Oil Hedge Agreement was executed during such Reporting Period

4) Forward Federal Debt Allocation (FFDA)

Year	Expected Payments	
	(R\$)	(US\$)
2019	683,668,600	175,340,104
2020	179,671,170	46,080,165
2021	8,160,790	2,092,993
Total allocation	871,500,560	223,513,262

The amounts to be deducted from RJS Oil Revenues are based on a report (Ofício SEFAZ/SGAB nº 247/2018), dated March 14, 2018, prepared *Secretaria da Fazenda do Estado do Rio de Janeiro*.

5) Forward PASEP Allocation (FPA)

$$FPA = 0.01 \times \left[\sum (a) + \sum (b) \right]$$

- (a) Forward Royalty (FR) for each Field
- (b) Forward Special Participation (FSP) for each Field

6) Forward FECAM Allocation (FFA)

$$FFA = \left\{ 0.05 \times \left[\sum (a) + \sum (b) \right] \times (c) \right\} + \left\{ 0.10 \times \left[\sum (a) + \sum (b) \right] \times [1 - (c)] \right\}$$

- (a) Forward Royalty (FR) for each Field
- (b) Forward Special Participation (FSP) for each Field
- (c) Forward FECAM Allocation Factor (FFAF) – Table 17

7) Forward Municipalities Allocation (FMA)

$$FMA = (a) \times 0.25$$

$$FR < 5\% = 0.05 \times (b) \times (c)$$

- (a) Forward Royalty up to 5% (FR<5%)
- (b) Forward Royalty Gross Revenue (FRGR) for each Field
- (c) Forward RJS Royalty Rate – Table 16 (Juridical Condition 1)



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

8) Forward Expected Expenses (FEE)

$$FEE = (a) + (b) + (c)$$

- (a) Expected Amount of Priority (a) of the Collections Account Waterfall
- (b) Expected Amount of Priority (b) of the Collections Account Waterfall
- (c) Expected Amount of Priority (a) of the Revenue Account Waterfall

Amounts in (US\$)

Year	Quarter	(a)		(b)				(c)	Total
		IRRF	IOF	SF	BAF	BCAF	ECSE		
2019	1Q	10,897,593.46	233,999.63	12,310.53	12,310.53	0.00	149,559.45	98,284.35	11,404,057.96
	2Q	10,667,564.50	228,995.57	12,310.53	12,310.53	13,359.86	149,559.45	98,284.35	11,182,384.80
	3Q	10,419,290.69	223,903.03	12,310.53	12,310.53	0.00	96,176.04	75,000.00	10,838,990.83
	4Q	10,186,904.10	218,898.97	12,310.53	12,310.53	0.00	96,176.04	75,000.00	10,601,600.18
2020	1Q	9,954,517.52	213,894.91	12,310.53	12,310.53	0.00	96,176.04	75,000.00	10,364,209.54
	2Q	9,683,592.10	208,010.22	12,310.53	12,310.53	13,359.86	96,176.04	75,000.00	10,100,759.29
	3Q	9,386,245.56	201,658.13	12,310.53	12,310.53	0.00	96,176.04	75,000.00	9,783,700.79
	4Q	9,091,256.64	195,306.03	12,310.53	12,310.53	0.00	96,176.04	75,000.00	9,482,359.78
2021	1Q	8,796,267.72	188,953.94	12,310.53	12,310.53	0.00	96,176.04	75,000.00	9,181,018.76
	2Q	8,462,739.96	181,721.20	12,310.53	12,310.53	13,359.86	96,176.04	75,000.00	8,853,618.13
	3Q	8,111,256.38	174,203.36	12,310.53	12,310.53	0.00	96,176.04	75,000.00	8,481,256.84
	4Q	7,762,130.41	166,685.51	12,310.53	12,310.53	0.00	96,176.04	75,000.00	8,124,613.03
2022	1Q	7,413,004.45	159,167.67	12,310.53	12,310.53	0.00	96,176.04	75,000.00	7,767,969.22
	2Q	7,009,542.14	150,429.01	12,310.53	12,310.53	13,359.86	96,176.04	75,000.00	7,369,128.12
	3Q	6,571,151.76	141,405.24	12,310.53	12,310.53	0.00	0.00	75,000.00	6,812,178.07
	4Q	6,152,091.24	132,381.47	12,310.53	12,310.53	0.00	0.00	75,000.00	6,384,093.78
2023	1Q	5,733,030.73	123,357.70	12,310.53	12,310.53	0.00	0.00	75,000.00	5,956,009.50
	2Q	5,259,633.87	113,113.12	12,310.53	12,310.53	13,359.86	0.00	75,000.00	5,485,727.92
	3Q	4,768,281.18	102,583.43	12,310.53	12,310.53	0.00	0.00	75,000.00	4,970,485.67
	4Q	4,279,286.11	92,053.73	12,310.53	12,310.53	0.00	0.00	75,000.00	4,470,960.91
2024	1Q	3,790,291.04	81,524.04	12,310.53	12,310.53	0.00	0.00	75,000.00	3,971,436.15
	2Q	3,316,645.74	71,274.11	12,310.53	12,310.53	13,359.86	0.00	75,000.00	3,500,900.78
	3Q	2,825,044.61	60,739.07	12,310.53	12,310.53	0.00	0.00	75,000.00	2,985,404.74
	4Q	2,620,156.26	56,327.14	12,310.53	12,310.53	0.00	0.00	75,000.00	2,776,104.46
2025	1Q	2,415,267.90	51,915.21	12,310.53	12,310.53	0.00	0.00	75,000.00	2,566,804.18
	2Q	2,212,737.18	47,503.28	12,310.53	12,310.53	13,359.86	0.00	75,000.00	2,373,221.38
	3Q	1,992,250.61	42,806.24	12,310.53	12,310.53	0.00	0.00	75,000.00	2,134,677.92
	4Q	1,774,121.67	38,109.19	12,310.53	12,310.53	0.00	0.00	75,000.00	1,911,851.93
2026	1Q	1,555,992.73	33,412.15	12,310.53	12,310.53	0.00	0.00	75,000.00	1,689,025.95
	2Q	1,321,618.54	28,314.53	12,310.53	12,310.53	13,359.86	0.00	75,000.00	1,462,914.00
	3Q	1,069,288.52	22,931.79	12,310.53	12,310.53	0.00	0.00	75,000.00	1,191,841.37
	4Q	819,316.12	17,549.05	12,310.53	12,310.53	0.00	0.00	75,000.00	936,486.23
2027	1Q	569,343.72	12,166.31	12,310.53	12,310.53	0.00	0.00	75,000.00	681,131.09
	2Q	470,551.93	9,988.22	12,310.53	12,310.53	13,359.86	0.00	75,000.00	593,521.08
	3Q	355,540.78	7,562.42	12,310.53	12,310.53	0.00	0.00	75,000.00	462,724.26
	4Q	242,887.25	5,136.61	12,310.53	12,310.53	0.00	0.00	75,000.00	347,644.93
2028	1Q	130,233.72	2,710.81	12,310.53	12,310.53	0.00	0.00	75,000.00	232,565.59

IRRF – Imposto de Renda Retido na Fonte

IOF – Imposto sobre Operações de Crédito, Câmbio e Seguros ou relativos a Títulos ou Valores Mobiliário

SF – Servicer Fee

BAF – Bond Administrator Fee

BCAF – Brazilian Collateral Agent Fee

ECSE – Excess Companhia Securitizadora Expenses



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

9) Forward Quarterly Debt Service (FQDS)

(i) Debt Service for the Series 2014-1 Notes

Date	Scheduled Payment		Early Principal Payment	Debt Service	Balance
	Principal	Interest			
10/06/2014	0	36,805,556	0	36,805,556	2,000,000,000
01/06/2015	0	31,250,000	0	31,250,000	2,000,000,000
04/06/2015	0	31,250,000	0	31,250,000	2,000,000,000
07/06/2015	0	31,250,000	0	31,250,000	2,000,000,000
10/06/2015	0	31,250,000	0	31,250,000	2,000,000,000
01/06/2016	0	43,916,667	0	43,916,667	2,000,000,000
04/06/2016	20,000,000	46,250,000	0	66,250,000	1,980,000,000
07/06/2016	20,000,000	45,787,500	29,758,320	95,545,820	1,930,241,680
08/06/2016	0	14,878,946	5,170,988	20,049,934	1,925,070,692
09/06/2016	0	14,885,452	68,866,247	83,751,699	1,856,204,445
10/06/2016	7,587,042	14,308,243	0	21,895,284	1,848,617,403
11/06/2016	8,550,900	14,249,759	0	22,800,660	1,840,066,503
12/06/2016	2,802,920	14,183,846	0	16,986,766	1,837,263,583
01/06/2017	18,940,862	14,162,240	0	33,103,102	1,818,322,722
02/06/2017	0	14,016,238	0	14,016,238	1,818,322,722
03/06/2017	0	14,016,238	0	14,016,238	1,818,322,722
04/06/2017	28,411,293	14,016,238	1,668,129	44,095,659	1,788,243,300
05/06/2017	0	13,784,375	0	13,784,375	1,788,243,300
06/06/2017	0	13,784,375	184,216,034	198,000,409	1,604,027,266
07/06/2017	12,683,902	12,364,377	0	25,048,278	1,591,343,364
08/06/2017	12,776,849	12,266,605	1,456,007	26,499,461	1,577,110,508
09/06/2017	0	12,156,894	127,601,056	139,757,949	1,449,509,453
10/06/2017	17,007,904	11,173,302	0	28,181,206	1,432,501,549
11/06/2017	6,371,280	11,042,199	9,307,195	26,720,675	1,416,823,073
01/06/2018	23,226,608	21,842,689	0	45,069,297	1,393,596,465
04/06/2018	30,968,810	32,226,918	0	63,195,729	1,362,627,655
07/06/2018	30,968,810	31,510,765	0	62,479,575	1,331,658,844
10/06/2018	30,968,810	30,794,611	0	61,763,421	1,300,690,034
01/06/2019	30,968,810	30,078,457	0	61,047,267	1,269,721,224
04/06/2019	38,711,013	29,362,303	0	68,073,316	1,231,010,211
07/06/2019	38,711,013	28,467,111	0	67,178,124	1,192,299,198
10/06/2019	38,711,013	27,571,919	0	66,282,932	1,153,588,185
01/06/2020	38,711,013	26,676,727	0	65,387,740	1,114,877,172
04/06/2020	46,453,216	25,781,535	0	72,234,750	1,068,423,957
07/06/2020	46,453,216	24,707,304	0	71,160,519	1,021,970,741
10/06/2020	46,453,216	23,633,073	0	70,086,289	975,517,526
01/06/2021	46,453,216	22,558,843	0	69,012,058	929,064,310
04/06/2021	54,195,418	21,484,612	0	75,680,030	874,868,892
07/06/2021	54,195,418	20,231,343	0	74,426,761	820,673,474
10/06/2021	54,195,418	18,978,074	0	73,173,492	766,478,056
01/06/2022	54,195,418	17,724,805	0	71,920,223	712,282,638
04/06/2022	65,808,722	16,471,536	0	82,280,258	646,473,916
07/06/2022	65,808,722	14,949,709	0	80,758,431	580,665,194
10/06/2022	65,808,722	13,427,883	0	79,236,605	514,856,472
01/06/2023	65,808,722	11,906,056	0	77,714,778	449,047,750
04/06/2023	77,422,026	10,384,229	0	87,806,255	371,625,724
07/06/2023	77,422,026	8,593,845	0	86,015,871	294,203,698
10/06/2023	77,422,026	6,803,461	0	84,225,486	216,781,672
01/06/2024	77,422,026	5,013,076	0	82,435,102	139,359,647
04/06/2024	69,679,823	3,222,692	0	72,902,515	69,679,823
07/06/2024	69,679,823	1,611,346	0	71,291,169	0



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

9) Forward Quarterly Debt Service (FQDS) (cont.)

(ii) Debt Service for the Series 2014-2 Notes

Date	Scheduled Payment		Early Principal Payment	Debt Service	Balance
	Principal	Interest			
10/06/2014	0	109,998,331	0	109,998,331	2,400,000,000
01/06/2015	0	55,239,401	0	55,239,401	1,440,000,000
04/06/2015	0	52,561,534	0	52,561,534	1,440,000,000
07/06/2015	51,422,400	53,453,623	0	104,876,023	1,388,577,600
10/06/2015	51,422,400	54,128,577	0	105,550,977	1,337,155,200
01/06/2016	51,422,400	57,938,770	0	109,361,170	1,285,732,800
04/06/2016	51,422,400	56,146,749	0	107,569,149	1,234,310,400
07/06/2016	51,422,400	56,640,579	45,550,176	153,613,155	1,137,337,824
08/06/2016	0	0	0	0	1,137,337,824
09/06/2016	0	33,018,434	100,716,323	133,734,757	1,036,621,501
10/06/2016	18,164,108	15,782,069	0	33,946,177	1,018,457,393
11/06/2016	20,298,717	14,671,452	0	34,970,169	998,158,677
12/06/2016	6,601,092	14,379,040	0	20,980,132	991,557,585
01/06/2017	45,063,916	15,720,506	0	60,784,422	946,493,669
02/06/2017	0	12,949,675	0	12,949,675	946,493,669
03/06/2017	0	12,264,928	0	12,264,928	946,493,669
04/06/2017	45,063,916	15,692,215	868,086	61,624,217	900,561,661
05/06/2017	0	12,321,245	0	12,321,245	900,561,661
06/06/2017	0	13,625,290	134,886,276	148,511,566	765,675,385
07/06/2017	19,368,984	11,584,492	0	30,953,476	746,306,401
08/06/2017	18,908,354	11,832,205	1,647,062	32,387,620	725,750,986
09/06/2017	0	11,506,312	94,082,811	105,589,123	631,668,175
10/06/2017	24,195,777	9,556,994	0	33,752,771	607,472,399
11/06/2017	9,044,038	8,311,275	8,895,660	26,250,972	589,532,701
01/06/2018	32,745,703	17,073,654	0	49,819,357	556,786,997
04/06/2018	32,745,703	24,314,368	0	57,060,071	524,041,294
07/06/2018	32,745,703	23,659,555	0	56,405,258	491,295,590
10/06/2018	32,745,703	23,183,445	0	55,929,148	458,549,887
01/06/2019	32,745,703	21,302,877	0	54,048,580	425,804,183
04/06/2019	32,745,703	19,781,608	0	52,527,311	393,058,480
07/06/2019	32,745,703	18,260,339	0	51,006,042	360,312,776
10/06/2019	32,745,703	16,739,070	0	49,484,773	327,567,073
01/06/2020	32,745,703	15,457,361	0	48,203,064	294,821,370
04/06/2020	32,745,703	13,912,144	0	46,657,847	262,075,666
07/06/2020	32,745,703	12,366,927	0	45,112,630	229,329,963
10/06/2020	32,745,703	10,989,543	0	43,735,247	196,584,259
01/06/2021	32,745,703	9,420,362	0	42,166,065	163,838,556
04/06/2021	32,745,703	7,611,457	0	40,357,160	131,092,852
07/06/2021	32,745,703	6,186,060	0	38,931,763	98,347,149
10/06/2021	32,745,703	4,712,817	0	37,458,521	65,601,446
01/06/2022	32,745,703	3,143,636	0	35,889,339	32,855,742
04/06/2022	32,855,742	1,526,381	0	34,382,123	0



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

9) Forward Quarterly Debt Service (FQDS) (cont.)

(iii) Debt Service for the Series 2014-3 Notes

Date	Scheduled Payment		Early Principal Payment	Debt Service	Balance
	Principal	Interest			
01/06/2015	0	9,281,250	0	9,281,250	1,100,000,000
04/06/2015	0	18,562,500	0	18,562,500	1,100,000,000
07/06/2015	0	18,562,500	0	18,562,500	1,100,000,000
10/06/2015	0	18,562,500	0	18,562,500	1,100,000,000
01/06/2016	0	25,529,167	0	25,529,167	1,100,000,000
04/06/2016	0	26,812,500	0	26,812,500	1,100,000,000
07/06/2016	0	26,812,500	37,656,262	64,468,762	1,100,000,000
08/06/2016	0	8,631,543	2,999,783	11,631,326	1,062,343,738
09/06/2016	0	8,635,521	26,854,876	35,490,397	1,059,343,955
10/06/2016	0	8,388,974	0	8,388,974	1,032,489,079
11/06/2016	0	8,388,974	0	8,388,974	1,032,489,079
12/06/2016	0	8,388,974	0	8,388,974	1,032,489,079
01/06/2017	0	8,388,974	0	8,388,974	1,032,489,079
02/06/2017	0	8,388,974	0	8,388,974	1,032,489,079
03/06/2017	0	8,388,974	0	8,388,974	1,032,489,079
04/06/2017	0	8,388,974	947,205	9,336,179	1,031,541,874
05/06/2017	0	8,381,278	0	8,381,278	1,031,541,874
06/06/2017	0	8,381,278	95,353,657	103,734,935	936,188,217
07/06/2017	2,331,926	7,606,529	0	9,938,456	933,856,290
08/06/2017	2,349,015	7,587,582	593,232	10,529,829	930,914,044
09/06/2017	0	7,563,677	65,242,256	72,805,933	865,671,788
10/06/2017	3,164,620	7,033,583	0	10,198,204	862,507,168
11/06/2017	1,185,489	7,007,871	5,017,092	13,210,452	856,304,587
01/06/2018	8,649,541	13,914,950	0	22,564,491	847,655,045
04/06/2018	8,649,541	20,661,592	0	29,311,133	839,005,504
07/06/2018	8,649,541	20,450,759	0	29,100,300	830,355,963
10/06/2018	8,649,541	20,239,927	0	28,889,468	821,706,421
01/06/2019	8,649,541	20,029,094	0	28,678,635	813,056,880
04/06/2019	17,299,083	19,818,261	0	37,117,344	795,757,798
07/06/2019	17,299,083	19,396,596	0	36,695,679	778,458,715
10/06/2019	17,299,083	18,974,931	0	36,274,014	761,159,632
01/06/2020	17,299,083	18,553,266	0	35,852,349	743,860,550
04/06/2020	19,461,468	18,131,601	0	37,593,069	724,399,082
07/06/2020	19,461,468	17,657,228	0	37,118,696	704,937,614
10/06/2020	19,461,468	17,182,854	0	36,644,322	685,476,146
01/06/2021	19,461,468	16,708,481	0	36,169,949	666,014,678
04/06/2021	21,623,853	16,234,108	0	37,857,961	644,390,825
07/06/2021	21,623,853	15,707,026	0	37,330,880	622,766,972
10/06/2021	21,623,853	15,179,945	0	36,803,798	601,143,119
01/06/2022	21,623,853	14,652,864	0	36,276,717	579,519,266
04/06/2022	23,786,239	14,125,782	0	37,912,021	555,733,027
07/06/2022	23,786,239	13,545,993	0	37,332,231	531,946,789
10/06/2022	23,786,239	12,966,203	0	36,752,441	508,160,550
01/06/2023	23,786,239	12,386,413	0	36,172,652	484,374,312
04/06/2023	25,948,624	11,806,624	0	37,755,248	458,425,688
07/06/2023	25,948,624	11,174,126	0	37,122,750	432,477,064
10/06/2023	25,948,624	10,541,628	0	36,490,252	406,528,440
01/06/2024	25,948,624	9,909,131	0	35,857,755	380,579,816
04/06/2024	30,273,394	9,276,633	0	39,550,027	350,306,422
07/06/2024	30,273,394	8,538,719	0	38,812,114	320,033,027
10/06/2024	30,273,394	7,800,805	0	38,074,200	289,759,633
01/06/2025	30,273,394	7,062,891	0	37,336,286	259,486,238
04/06/2025	30,273,394	6,324,977	0	36,598,372	229,212,844
07/06/2025	30,273,394	5,587,063	0	35,860,458	198,939,449
10/06/2025	30,273,394	4,849,149	0	35,122,544	168,666,055
01/06/2026	30,273,394	4,111,235	0	34,384,630	138,392,660



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

9) Forward Quarterly Debt Service (FQDS) (cont.)

(iii) Debt Service for the Series 2014-3 Notes (cont.)

Date	Scheduled Payment		Early Principal Payment	Debt Service	Balance
	Principal	Interest			
04/06/2026	34,598,165	3,373,321	0	37,971,486	103,794,495
07/06/2026	34,598,165	2,529,991	0	37,128,156	69,196,330
10/06/2026	34,598,165	1,686,661	0	36,284,826	34,598,165
01/06/2027	34,598,165	843,330	0	35,441,495	0



(ii) Forward-Looking Debt Service Coverage Ratio (FLDSCR) (cont.)

9) Forward Quarterly Debt Service (FQDS) (cont.)

(iv) Debt Service for the Series 2018-1 Notes

Date	Scheduled Payment		Early Principal Payment	Debt Service	Balance
	Principal	Interest			
07/06/2018	0	10,523,333	0	10,523,333	600,000,000
10/06/2018	0	12,300,000	0	12,300,000	600,000,000
01/06/2019	0	12,300,000	0	12,300,000	600,000,000
04/06/2019	0	12,300,000	0	12,300,000	600,000,000
07/06/2019	0	12,300,000	0	12,300,000	600,000,000
10/06/2019	0	12,300,000	0	12,300,000	600,000,000
01/06/2020	0	12,300,000	0	12,300,000	600,000,000
04/06/2020	0	12,300,000	0	12,300,000	600,000,000
07/06/2020	6,000,000	12,300,000	0	18,300,000	594,000,000
10/06/2020	6,000,000	12,177,000	0	18,177,000	588,000,000
01/06/2021	6,000,000	12,054,000	0	18,054,000	582,000,000
04/06/2021	6,000,000	11,931,000	0	17,931,000	576,000,000
07/06/2021	9,660,000	11,808,000	0	21,468,000	566,340,000
10/06/2021	9,660,000	11,609,970	0	21,269,970	556,680,000
01/06/2022	9,660,000	11,411,940	0	21,071,940	547,020,000
04/06/2022	9,660,000	11,213,910	0	20,873,910	537,360,000
07/06/2022	13,320,000	11,015,880	0	24,335,880	524,040,000
10/06/2022	13,320,000	10,742,820	0	24,062,820	510,720,000
01/06/2023	13,320,000	10,469,760	0	23,789,760	497,400,000
04/06/2023	13,320,000	10,196,700	0	23,516,700	484,080,000
07/06/2023	16,980,000	9,923,640	0	26,903,640	467,100,000
10/06/2023	16,980,000	9,575,550	0	26,555,550	450,120,000
01/06/2024	16,980,000	9,227,460	0	26,207,460	433,140,000
04/06/2024	16,980,000	8,879,370	0	25,859,370	416,160,000
07/06/2024	20,640,000	8,531,280	0	29,171,280	395,520,000
10/06/2024	20,640,000	8,108,160	0	28,748,160	374,880,000
01/06/2025	20,640,000	7,685,040	0	28,325,040	354,240,000
04/06/2025	20,640,000	7,261,920	0	27,901,920	333,600,000
07/06/2025	24,300,000	6,838,800	0	31,138,800	309,300,000
10/06/2025	24,300,000	6,340,650	0	30,640,650	285,000,000
01/06/2026	24,300,000	5,842,500	0	30,142,500	260,700,000
04/06/2026	24,300,000	5,344,350	0	29,644,350	236,400,000
07/06/2026	27,960,000	4,846,200	0	32,806,200	208,440,000
10/06/2026	27,960,000	4,273,020	0	32,233,020	180,480,000
01/06/2027	27,960,000	3,699,840	0	31,659,840	152,520,000
04/06/2027	27,960,000	3,126,660	0	31,086,660	124,560,000
07/06/2027	31,140,000	2,553,480	0	33,693,480	93,420,000
10/06/2027	31,140,000	1,915,110	0	33,055,110	62,280,000
01/06/2028	31,140,000	1,276,740	0	32,416,740	31,140,000
04/06/2028	31,140,000	638,370	0	31,778,370	0



Section (D) – Expenses Account Detailed Information

(i) Taxation Expenses Transfer Amount

All funds transferred to the Issuer outside Brazil are subject to Brazilian withholding tax as per below:

(a) IOF (*Imposto sobre Operações de Crédito, Câmbio e Seguros ou relativos a Títulos ou Valores Mobiliário*) at the rate of 0.38%

(b) IRRF (*Imposto de Renda Retido na Fonte*) at the rate of 15.00%, for the amounts other than related to Principal Payment

All amounts related to Companhia Securitizadora Expenses not transferred to the Issuer outside Brazil are also subject to IRRF (*Imposto de Renda Retido na Fonte*) at the rate of 15.00%,

Tax	Amount
IOF	R\$ 1,863,313.69
IRRF	R\$ 52,327,846.96
Total Taxation Expenses	R\$ 54,191,160.65

(ii) Excess Companhia Securitizadora Expenses Transfer Amount

Service Provider	Amount
Cetip S.A. – Mercados Organizados	R\$ 25,783.14
Banco do Brasil S.A. – Paying Agent Fee	R\$ 18,298.29
Banco do Brasil S.A. – Local Debenture Collateral Agent Fee	R\$ 12,117.39
BDO RCS Controladoria e Contabilidade Ltda.	R\$ 37,551.03
Fundo Único de Previdência Social do Estado do Rio de Janeiro	R\$ 2,246.04
Companhia Securitizadora Director's Remuneration	R\$ 47,775.00
Cescon, Barrieu, Flesch & Barreto Sociedade de Advogados	R\$ 9,203.33
Taxation on Companhia Securitizadora's Revenue – PIS/COFINS	R\$ 7,460.20
Total Excess Companhia Securitizadora Expenses	R\$ 160,434.42

(iii) Issuer Expenses Transfer Amount

Service Provider	Amount
Wilmington Trust	R\$ 22,318.80
Citibank, N.A.	R\$ 116,089.00
Alston & Bird LLP	R\$ 106,151.01
Total Issuer Expenses	R\$ 244,558.81



Section (E) – Transaction Accounts Balance

Collections Account		Amount
Date	Description	
09/21/18	Balance	R\$ 0.00
10/17/18	Assigned Oil Revenues and Assigned Oil Revenue Rights	R\$ 311,426,820.14
10/17/18	Taxation Expenses Transfer Amount	(R\$ 42,934,114.88)
10/17/18	Excess Companhia Securitizadora Expenses Transfer Amount	(R\$ 57,599.62)
10/17/18	Issuer Expenses Transfer Amount	(R\$ 40,917.80)
10/17/18	To the Series 2014-1 Senior Interest Subaccount	(R\$ 111,885,844.50)
10/17/18	To the Series 2014-2 Senior Interest Subaccount	(R\$ 19,346,863.36)
10/17/18	To the Series 2014-3 Senior Interest Subaccount	(R\$ 74,504,223.94)
10/17/18	To the Series 2018-1 Senior Interest Subaccount	(R\$ 45,753,540.00)
10/17/18	To the Series 2014-1 Senior Scheduled Principal Subaccount	(R\$ 10,811,079.72)
10/17/18	To the Series 2014-2 Senior Scheduled Principal Subaccount	(R\$ 3,073,118.32)
10/17/18	To the Series 2014-3 Senior Scheduled Principal Subaccount	(R\$ 3,019,518.00)
10/26/18	Assigned Oil Revenues and Assigned Oil Revenue Rights	R\$ 930,068.26
10/26/18	From the Series 2014-2 Special Debt Service Reserve Account	R\$ 9,627,112.09
10/26/18	Taxation Expenses Transfer Amount	(R\$ 625,039.89)
10/26/18	To the Series 2014-1 Senior Scheduled Principal Subaccount	(R\$ 6,359,487.56)
10/26/18	To the Series 2014-2 Senior Scheduled Principal Subaccount	(R\$ 1,796,457.77)
10/26/18	To the Series 2014-3 Senior Scheduled Principal Subaccount	(R\$ 1,776,195.13)
11/19/18	Assigned Oil Revenues and Assigned Oil Revenue Rights	R\$ 2,163,557,233.28
11/19/18	From the Series 2014-1 Special Debt Service Reserve Account	R\$ 99,813,647.53
11/19/18	From the Series 2014-2 Special Debt Service Reserve Account	R\$ 36,232,603.27
11/19/18	From the Series 2014-3 Special Debt Service Reserve Account	R\$ 34,635,565.01
11/19/18	From the Series 2018-1 Special Debt Service Reserve Account	R\$ 54,944,823.55
11/19/18	Taxation Expenses Transfer Amount	(R\$ 10,568,515.92)
11/19/18	Excess Companhia Securitizadora Expenses Transfer Amount	(R\$ 47,084.47)
11/19/18	To the Series 2014-1 Senior Scheduled Principal Subaccount	(R\$ 100,037,302.94)
11/19/18	To the Series 2014-2 Senior Scheduled Principal Subaccount	(R\$ 27,537,841.56)
11/19/18	To the Series 2014-3 Senior Scheduled Principal Subaccount	(R\$ 27,940,265.43)
11/19/18	To the Liquidity Account	(R\$ 297,407,727.19)
11/19/18	To the Special Interest Account	(R\$ 34,856,760.76)
11/19/18	To the holder of the Sponsor Note and to RJS	(R\$ 1,890,788,374.37)
11/27/18	Assigned Oil Revenues and Assigned Oil Revenue Rights	R\$ 867,905,695.97
11/27/18	To the holder of the Sponsor Note and to RJS	(R\$ 867,905,695.97)
11/29/18	Assigned Oil Revenues and Assigned Oil Revenue Rights	R\$ 80,244,063.68
11/29/18	To the holder of the Sponsor Note and to RJS	(R\$ 80,244,063.68)



Section (E) – Transaction Accounts Balance (cont.)

Collections Account (cont.)		Amount
Date	Description	
12/14/18	Assigned Oil Revenues and Assigned Oil Revenue Rights	R\$ 368,603,513.96
12/14/18	Taxation Expenses Transfer Amount	(R\$ 63,489.96)
12/14/18	Servicer Fee Transfer Amount	(R\$ 48,000.00)
12/14/18	Bond Administrator Fee Transfer Amount	(R\$ 48,000.00)
12/14/18	Excess Companhia Securitizadora Expenses Transfer Amount	(R\$ 55,750.33)
12/14/18	Issuer Expenses Transfer Amount	(R\$ 203,641.01)
12/14/18	To the holder of the Sponsor Note and to RJS	(R\$ 368,184,632.66)
12/21/18	Assigned Oil Revenues and Assigned Oil Revenue Rights	R\$ 213,829.55
12/21/18	To the holder of the Sponsor Note	(R\$ 213,829.55)
Final Balance as of the close of business of December 21, 2018		R\$ 0.00

Revenue Account		Amount
Date	Description	
09/21/18	Balance	US\$ 0.00
10/17/18	From the Collections Account	US\$ 66,136,653.57
10/17/18	To the Issuer Expenses Subaccount	(US\$ 11,000.00)
10/17/18	To the Series 2014-1 Senior Interest Subaccount	(US\$ 30,078,457.04)
10/17/18	To the Series 2014-3 Senior Interest Subaccount	(US\$ 20,029,094.02)
10/17/18	To the Series 2018-1 Senior Interest Subaccount	(US\$ 12,300,000.00)
10/17/18	To the Series 2014-1 Senior Scheduled Principal Subaccount	(US\$ 2,906,360.48)
10/17/18	To the Series 2014-3 Senior Scheduled Principal Subaccount	(US\$ 811,742.03)
10/26/18	From the Collections Account	US\$ 2,195,332.49
10/26/18	To the Series 2014-1 Senior Scheduled Principal Subaccount	(US\$ 1,716,044.02)
10/26/18	To the Series 2014-3 Senior Scheduled Principal Subaccount	(US\$ 479,288.47)
11/19/18	From the Collections Account	US\$ 62,152,030.41
11/19/18	From the Series 2014-1 Debt Service Reserve Account	US\$ 26,287,502.64
11/19/18	From the Series 2014-3 Debt Service Reserve Account	US\$ 9,121,823.81
11/19/18	From the Series 2018-1 Debt Service Reserve Account	US\$ 14,470,588.24
11/19/18	To the Series 2014-1 Senior Scheduled Principal Subaccount	(US\$ 26,346,405.83)
11/19/18	To the Series 2014-3 Senior Scheduled Principal Subaccount	(US\$ 7,358,510.78)
11/19/18	To the Liquidity Reserve Account	(US\$ 78,327,028.49)
12/14/18	From the Collections Account	US\$ 52,221.00
12/14/18	To the Issuer Expenses Subaccount	(US\$ 52,221.00)
Final Balance as of the close of business of December 21, 2018		US\$ 0.00



Section (E) – Transaction Accounts Balance (cont.)

Expenses Account		Amount
Date	Description	
09/21/18	Balance	US\$ 0.00
10/17/18	From the Revenue Account	US\$ 11,000.00
10/17/18	Issuer Expenses	(US\$ 11,000.00)
12/14/18	From the Collections Account	US\$ 52,221.00
12/14/18	Issuer Expenses	(US\$ 52,221.00)
Final Balance as of the close of business of December 21, 2018		US\$ 0.00

Series 2014-1 Series Account		Amount
Date	Description	
09/21/18	Balance	US\$ 61,763,421.11
10/09/18	Interest Payment	(US\$ 30,794,610.78)
10/09/18	Pending Scheduled Principal Payment	(US\$ 30,968,810.33)
10/17/18	Series 2014-1 Senior Interest Subaccount	US\$ 30,078,457.04
10/17/18	Series 2014-1 Senior Scheduled Principal Subaccount	US\$ 2,906,360.48
10/26/18	Series 2014-1 Senior Scheduled Principal Subaccount	US\$ 1,716,044.02
11/19/18	Series 2014-1 Senior Scheduled Principal Subaccount	US\$ 26,346,405.83
Final Balance as of the close of business of December 21, 2018		US\$ 61,047,267.37

Series 2014-2 Special Series Account		Amount
Date	Description	
09/21/18	Balance	R\$ 55,654,326.53
10/08/18	Interest Payment	(R\$ 22,908,623.06)
10/08/18	Pending Scheduled Principal Payment	(R\$ 32,745,703.47)
10/17/18	Series 2014-2 Senior Interest Subaccount	R\$ 19,346,863.36
10/17/18	Series 2014-2 Senior Scheduled Principal Subaccount	R\$ 3,073,118.32
10/26/18	Eligible Investments	R\$ 295,130.17
10/26/18	Series 2014-2 Senior Scheduled Principal Subaccount	R\$ 1,796,457.77
11/19/18	Eligible Investments	R\$ 43,155.65
11/19/18	Series 2014-2 Senior Scheduled Principal Subaccount	R\$ 27,537,841.56
Final Balance as of the close of business of December 21, 2018		R\$ 52,092,566.83

Series 2014-3 Series Account		Amount
Date	Description	
09/21/18	Balance	US\$ 28,889,467.87



Section (E) – Transaction Accounts Balance (cont.)

Series 2014-3 Series Account (cont.)		Amount
Date	Description	
10/09/18	Interest Payment	(US\$ 20,239,926.59)
10/09/18	Pending Scheduled Principal Payment	(US\$ 8,649,541.28)
10/17/18	Series 2014-3 Senior Interest Subaccount	US\$ 20,029,094.02
10/17/18	Series 2014-3 Senior Scheduled Principal Subaccount	US\$ 811,742.03
10/26/18	Series 2014-3 Senior Scheduled Principal Subaccount	US\$ 479,288.47
11/19/18	Series 2014-3 Senior Scheduled Principal Subaccount	US\$ 7,358,510.78
Final Balance as of the close of business of December 21, 2018		US\$ 28,678,635.30

Series 2018-1 Series Account		Amount
Date	Description	
09/21/18	Balance	US\$ 12,300,000.00
10/09/18	Interest Payment	(US\$ 12,300,000.00)
10/17/18	Series 2018-1 Senior Interest Subaccount	US\$ 12,300,000.00
Final Balance as of the close of business of December 21, 2018		US\$ 12,300,000.00

Series 2014-1 Debt Service Reserve Account		Amount
Date	Description	
09/21/18	Balance	US\$ 216,724,744.36
11/19/18	To the Revenue Account	(US\$ 26,287,502.64)
Final Balance as of the close of business of December 21, 2018		US\$ 190,437,241.72

Series 2014-2 Special Debt Service Reserve Account		Amount
Date	Description	
09/21/18	Balance	R\$ 165,182,272.02
10/26/18	Eligible Investments	R\$ 1,957,729.09
10/26/18	To the Collections Account	(R\$ 9,627,112.09)
11/19/18	Eligible Investments	R\$ 429,593.91
11/19/18	To the Collections Account	(R\$ 36,232,603.27)
Final Balance as of the close of business of December 21, 2018		R\$ 121,709,879.66

Series 2014-3 Debt Service Reserve Account		Amount
Date	Description	
09/21/18	Balance	US\$ 101,590,770.30
11/19/18	To the Revenue Account	(US\$ 9,121,823.81)
Final Balance as of the close of business of December 21, 2018		US\$ 92,468,946.49



Section (E) – Transaction Accounts Balance (cont.)

Series 2018-1 Debt Service Reserve Account		Amount
Date	Description	
09/21/18	Balance	US\$ 43,411,764.72
11/19/18	To the Revenue Account	(US\$ 14,470,588.24)
Final Balance as of the close of business of December 21, 2018		US\$ 28,941,176.48

Liquidity Reserve Account		Amount
Date	Description	
09/21/18	Balance	US\$ 0.00
11/19/18	Liquidity Reserve Account	US\$ 78,327,028.49
Final Balance as of the close of business of December 21, 2018		US\$ 78,327,028.49

Special Interest Liquidity Reserve Account		Amount
Date	Description	
09/21/18	Balance	R\$ 0.00
11/09/18	Special Interest Liquidity Reserve Account	R\$ 34,856,760.76
Final Balance as of the close of business of December 21, 2018		R\$ 34,856,760.76

Trigger Event Reserve Account		Amount
Date	Description	
09/21/18	Balance	US\$ 0.00
Final Balance as of the close of business of December 21, 2018		US\$ 0.00

Special Interest Trigger Event Reserve Account		Amount
Date	Description	
09/21/18	Balance	R\$ 0.00
Final Balance as of the close of business of December 21, 2018		R\$ 0.00



Section (F) – Other Information

Events	Y / N
Has any Event of Default occurred or continued as of the close of business for the Indenture Trustee on the related Allocation Date?	No
Has any Trigger Event occurred or continued as of the close of business for the Indenture Trustee on the related Allocation Date?	Yes
Has any Bond Administrator Replacement Event occurred or continued as of the close of business for the Indenture Trustee on the related Allocation Date?	No
Has any Servicer Replacement Event occurred or continued as of the close of business for the Indenture Trustee on the related Allocation Date?	No
Has any Event of Default been declared as of the close of business for the Indenture Trustee on the related Allocation Date?	No
Has any Early Amortization Period been declared as of the close of business for the Indenture Trustee on the related Allocation Date?	No
Has there been the occurrence of conditions which give rise to any Sponsor Refund Obligations or any RJS Damages as of the close of business for the Indenture Trustee on the related Allocation Date?	No

Notes:

1) The following Trigger Event continued during such Reporting Period, according to item (b) of the “Trigger Event” definition, in the Appendix 1 of the Indenture:

“(b) with respect to the pending Scheduled Payment Date on or after the Data Acquisition Date and the related Quarterly Reporting Period, the Minimum Average Forward-Looking Debt Service Coverage Ratio projected with respect to such Quarterly Reporting Period is less than the Minimum Average Forward-Looking Debt Service Coverage Ratio Trigger Threshold.”



Appendix 1

According to the Amended and Restated Indenture, the definition of “Forward Oil Production Adjustment Factor” (FOPAF) and “Forward Gas Production Adjustment Factor” (FGPAF) shall both be one, if the most recent Independent Consultant’s Report was dated as of a date, and delivered in accordance with the requirements of the Indenture and made available to Instrumentholders pursuant to Section 2.13 of the Indenture within, not more than six months prior to such time of determination.

For information purposes only, we provide below the calculation of minimum FLDSCR considering both FOPAF and FGPAF as one. Please note that this calculation of minimum FLDSCR is not considered for the requirements of any Transaction Documents.

Amounts in (US\$ million)

Year	Quarter	(a) + (b)	(c)	(d)	(e)	(f) ¹	(g)	(h)	FQDS	FLDSCR	
										Quarter	Annual
2019	1Q	492.17	0.00	175.34	4.92	0.00	27.90	11.40	130.96	2.1	3.1
	2Q	483.78	0.00	0.00	4.84	0.00	29.23	11.18	129.26	3.4	3.4
	3Q	489.84	0.00	0.00	4.90	0.00	29.58	10.84	127.55	3.5	3.4
	4Q	494.02	0.00	0.00	4.94	0.00	29.79	10.60	125.90	3.6	3.4
2020	1Q	507.08	0.00	46.08	5.07	0.00	31.35	10.36	134.09	3.1	3.4
	2Q	529.52	0.00	0.00	5.30	0.00	34.41	10.10	138.15	3.5	3.5
	3Q	532.09	0.00	0.00	5.32	0.00	34.57	9.78	136.12	3.5	3.4
	4Q	534.00	0.00	0.00	5.34	0.00	34.69	9.48	134.05	3.6	3.3
2021	1Q	537.08	0.00	2.09	5.37	0.00	34.84	9.18	141.82	3.4	3.2
	2Q	493.63	0.00	0.00	4.94	0.00	35.00	8.85	143.21	3.1	3.1
	3Q	493.63	0.00	0.00	4.94	0.00	35.00	8.48	140.85	3.2	3.2
	4Q	493.63	0.00	0.00	4.94	0.00	35.00	8.12	138.47	3.2	3.2
2022	1Q	504.04	0.00	0.00	5.04	0.00	36.03	7.77	149.88	3.0	3.3
	2Q	521.21	0.00	0.00	5.21	0.00	38.09	7.37	142.43	3.3	3.3
	3Q	521.21	0.00	0.00	5.21	0.00	38.09	6.81	140.05	3.4	3.3
	4Q	521.21	0.00	0.00	5.21	0.00	38.09	6.38	137.68	3.4	3.4
2023	1Q	533.01	0.00	0.00	5.33	0.00	39.27	5.96	149.08	3.2	3.4
	2Q	558.79	0.00	0.00	5.59	0.00	41.63	5.49	150.04	3.4	3.5
	3Q	558.79	0.00	0.00	5.59	0.00	41.63	4.97	147.27	3.4	3.6
	4Q	558.79	0.00	0.00	5.59	0.00	41.63	4.47	144.50	3.5	4.8
2024	1Q	569.55	0.00	0.00	5.70	0.00	42.65	3.97	138.31	3.7	5.9
	2Q	589.56	0.00	0.00	5.90	0.00	44.68	3.50	139.27	3.8	7.1
	3Q	589.56	0.00	0.00	5.90	0.00	44.68	2.99	66.82	8.0	8.2
	4Q	589.56	0.00	0.00	5.90	0.00	44.68	2.78	65.66	8.2	8.2
2025	1Q	596.50	0.00	0.00	5.97	0.00	45.29	2.57	64.50	8.4	8.3
	2Q	595.62	0.00	0.00	5.96	0.00	46.51	2.37	67.00	8.1	8.2
	3Q	595.62	0.00	0.00	5.96	0.00	46.51	2.13	65.76	8.2	8.1
	4Q	595.62	0.00	0.00	5.96	0.00	46.51	1.91	64.53	8.4	8.0
2026	1Q	599.79	0.00	0.00	6.00	0.00	46.72	1.69	67.62	8.1	8.0
	2Q	597.52	0.00	0.00	5.98	0.00	47.16	1.46	69.93	7.8	10.3
	3Q	597.52	0.00	0.00	5.98	0.00	47.16	1.19	68.52	7.9	12.3
	4Q	597.52	0.00	0.00	5.98	0.00	47.16	0.94	67.10	8.1	14.4

Minimum Average Forward-Looking Debt Service Coverage Ratio: 3.1

1) According to the Sixth Waiver, Rescission and Amendment Agreement, no Forward FECAM Allocation is considered for purposes of FLDSCR calculation after Oil Revenues Dedicated Account Modification Legislation Effective Date.



Appendix 2

Updated Forward Oil Production provided by Wood Mackenzie on April 03, 2018.

Grouping Field	Forward Oil Production (Base Case Scenario) – Table 6 ('000 bbl/d)											
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Albacora	70.20	75.10	55.30	46.60	38.50	32.30	27.80	23.80	20.40	17.40	0.00	0.00
Albacora Leste	45.50	39.00	33.50	28.90	25.00	21.70	18.90	16.50	0.00	0.00	0.00	0.00
Atlanta	11.00	20.60	17.90	15.60	28.60	58.30	71.30	69.50	66.00	57.40	49.90	43.40
Barracuda Area	49.10	46.40	39.90	33.90	28.90	24.80	21.30	18.30	15.80	13.10	11.40	10.00
Berbigao	30.00	83.60	104.60	99.30	94.40	100.90	92.50	83.90	82.20	92.80	82.60	73.00
Bijupira	15.10	14.10	12.00	9.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BM-C-33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	83.00	106.80	102.00	98.10	90.70
Buzios	60.00	222.00	395.90	499.90	524.90	527.40	529.60	512.60	505.40	496.90	497.80	470.20
C Basin Central Pole	11.20	10.20	9.30	8.50	7.80	7.10	6.00	4.60	0.00	0.00	0.00	0.00
C Basin North East Pole	14.50	13.10	11.80	10.60	9.60	8.70	6.50	4.90	0.00	0.00	0.00	0.00
C Basin North Pole	20.70	19.00	17.50	15.70	14.10	12.70	11.30	10.20	9.10	0.00	0.00	0.00
C Basin South Pole	18.90	16.70	14.80	13.10	11.70	10.40	9.20	0.00	0.00	0.00	0.00	0.00
Caratinga Area	25.70	25.00	30.60	25.20	20.80	17.20	14.20	11.70	9.70	0.00	0.00	0.00
Cherne												
Espadarte Area	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Frade	41.00	32.80	36.00	49.50	43.20	25.20	20.70	21.20	20.40	0.00	0.00	0.00
Iara Entorno	10.00	30.00	96.00	135.00	134.50	142.70	187.00	198.90	196.20	193.90	203.40	0.00
Itapu	0.00	0.00	0.00	0.00	30.00	96.00	128.70	122.30	116.20	109.10	99.80	89.80
Libra	25.00	20.00	15.00	85.00	229.50	386.50	550.50	669.20	805.80	965.80	1130.50	1242.50
Lula-Iracema	884.00	1028.80	1101.30	1071.40	1053.00	1052.90	1051.60	983.40	893.60	793.70	703.90	619.20
Marlim	135.80	122.20	109.90	98.90	88.90	80.00	72.00	64.80	58.30	52.40	0.00	0.00
Marlim Leste Area	91.40	82.30	74.00	66.60	60.00	54.00	48.60	43.70	39.40	35.40	0.00	0.00
Marlim Sul	141.90	127.70	114.90	103.40	93.10	83.80	75.20	67.70	60.90	0.00	0.00	0.00
Maromba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.40	24.40	48.90	49.90	40.80
Oeste de Atapu	0.00	0.00	0.00	0.00	0.00	15.00	41.60	51.90	49.30	46.90	43.90	40.00
Oliva	0.00	0.00	0.00	0.00	0.00	5.00	9.30	14.90	23.60	24.10	20.50	17.40
Papa-Terra	18.80	15.60	22.60	48.90	87.90	103.80	87.20	72.60	59.40	49.90	41.90	35.20
Peregrino	63.30	63.60	71.30	85.40	88.70	87.70	83.60	76.80	71.50	67.20	63.80	61.00
Polvo	5.90	5.00	4.30	3.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roncador	258.80	301.00	337.10	329.20	335.40	329.10	314.30	295.00	250.60	213.60	182.60	156.60
Salema	4.10	3.10	2.40	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sepia	0.00	0.00	0.00	42.50	107.90	127.50	121.10	115.10	107.60	97.90	88.10	79.30
Sepia Leste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.50
Sul de Lula	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.00	29.30	27.80
Sururu	0.00	0.00	6.30	12.20	11.60	11.00	10.50	15.90	46.40	77.80	115.90	109.50
Tambau	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tartaruga Verde	25.90	86.80	125.70	119.90	101.90	86.60	73.60	62.60	53.20	45.20	38.40	0.00
Tubarao Azul	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tubarao Martelo	6.00	7.30	5.00	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Urugua	10.50	9.30	8.30	7.40	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Voador	2.00	1.70	1.40	1.20	1.00	0.90	0.80	0.60	0.50	0.50	0.00	0.00
Total	2098.60	2522.00	2874.60	3072.50	3277.50	3509.20	3684.90	3722.00	3692.70	3616.90	3551.70	3218.90



Appendix 3

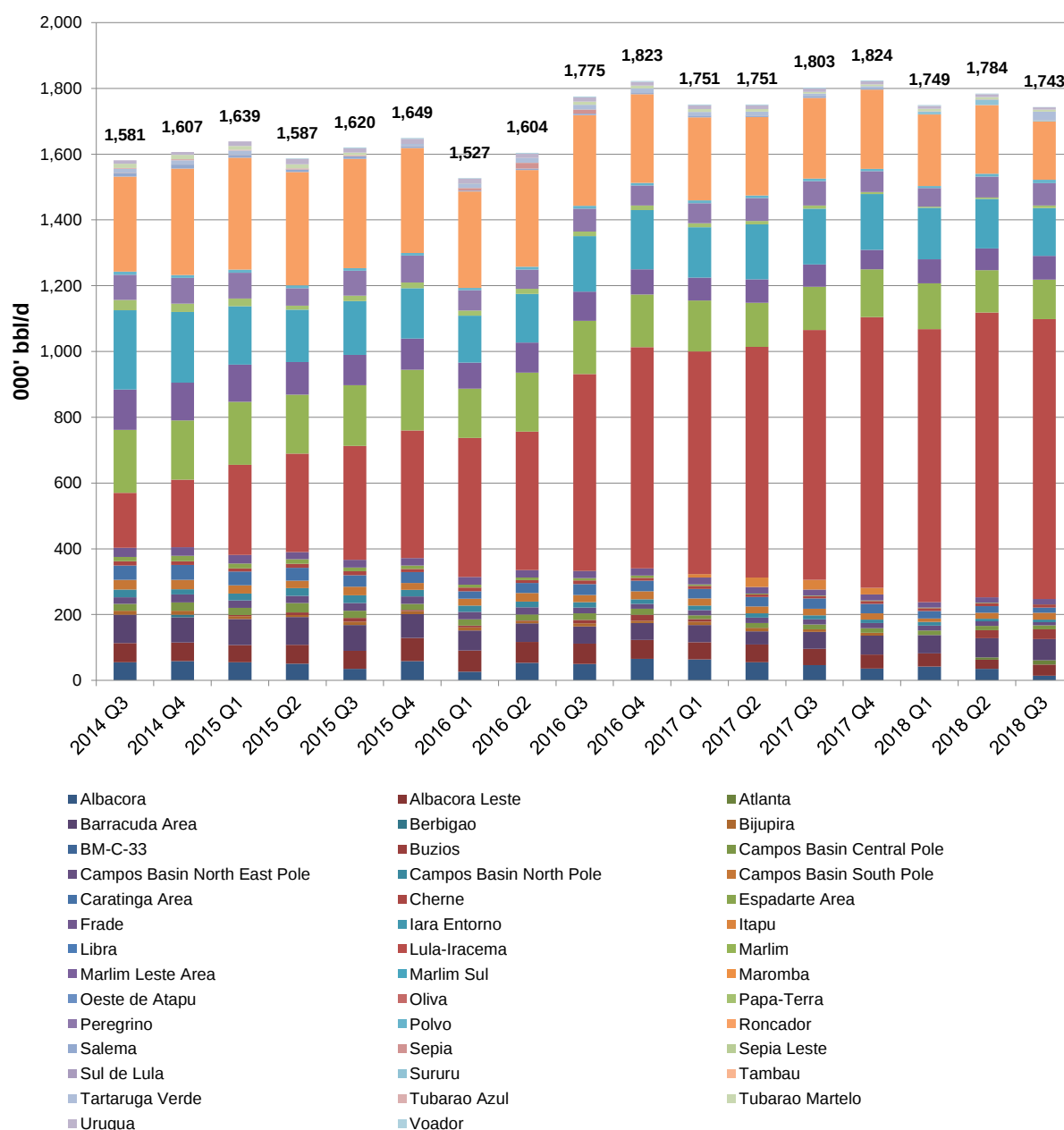
Updated Forward Gas Production provided by Wood Mackenzie on April 03, 2018.

Grouping Field	Forward Gas Production (Base Case Scenario) – Table 7 (MMcf/d)											
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Albacora	26.50	25.60	22.00	18.60	15.30	12.70	11.10	9.60	8.20	7.00	0.00	0.00
Albacora Leste	23.80	20.40	17.50	15.10	13.10	11.40	9.90	8.60	0.00	0.00	0.00	0.00
Atlanta	2.80	5.30	4.60	4.00	7.40	15.10	18.40	18.00	17.00	14.80	12.90	11.20
Barracuda Area	23.90	22.70	19.40	16.50	14.00	11.90	10.20	8.80	7.60	6.10	5.30	4.70
Berbigao	15.90	44.30	55.40	52.60	50.00	53.40	49.00	44.40	43.60	49.10	43.70	38.70
Bijupira	6.90	6.40	5.50	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BM-C-33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	413.00	500.00	490.30	482.40	475.80
Buzios	31.70	51.40	316.20	410.30	430.80	432.90	434.70	420.70	414.90	407.80	408.60	386.00
C Basin Central Pole	0.60	0.60	0.50	0.50	0.40	0.40	0.30	0.30	0.00	0.00	0.00	0.00
C Basin North East Pole	3.30	3.00	2.70	2.50	2.30	2.10	2.00	1.90	0.00	0.00	0.00	0.00
C Basin North Pole	16.40	14.60	13.10	11.70	10.40	9.30	8.30	7.40	6.60	0.00	0.00	0.00
C Basin South Pole	17.40	14.90	12.80	11.10	9.50	8.20	7.10	0.00	0.00	0.00	0.00	0.00
Caratinga Area	12.70	12.50	15.40	12.70	10.40	8.60	7.10	5.90	4.80	0.00	0.00	0.00
Cherne												
Espadarte Area	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Frade	16.60	13.30	14.60	20.20	17.80	10.30	8.50	8.70	8.40	0.00	0.00	0.00
Iara Entorno	0.00	15.90	50.80	71.50	71.20	75.60	99.00	105.30	103.90	102.70	107.70	0.00
Itapu	0.00	0.00	0.00	0.00	17.70	56.70	76.00	72.20	68.60	64.40	44.90	40.40
Libra	5.60	5.50	10.40	25.10	46.70	73.60	90.60	106.50	127.90	149.90	171.90	174.70
Lula-Iracema	624.40	719.50	764.70	743.80	730.90	719.90	715.80	668.30	606.40	538.00	476.70	419.00
Marlim	67.20	61.00	54.90	49.60	44.60	40.10	36.10	32.30	29.00	26.10	0.00	0.00
Marlim Leste Area	31.90	28.70	25.80	23.30	20.90	18.80	16.90	15.30	13.70	12.40	0.00	0.00
Marlim Sul	140.30	130.00	119.90	111.50	103.60	96.60	90.20	84.60	79.60	0.00	0.00	0.00
Maromba	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.10	8.30	8.60	8.60	8.50
Oeste de Atapu	0.00	0.00	0.00	0.00	0.00	7.90	22.00	27.50	26.10	24.80	23.30	21.20
Oliva	0.00	0.00	0.00	0.00	0.00	1.30	2.40	3.80	6.10	6.20	5.30	4.50
Papa-Terra	3.60	3.00	4.30	9.30	16.80	19.80	16.60	13.90	11.30	9.50	8.00	6.70
Peregrino	3.30	3.30	3.70	4.40	4.60	4.50	4.30	4.00	3.70	3.50	3.30	3.20
Polvo	0.50	0.40	0.30	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roncador	214.00	244.40	270.80	262.60	269.60	264.80	251.20	233.20	197.30	167.50	142.50	121.50
Salema	3.20	2.50	1.90	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sepia	0.00	0.00	0.00	19.20	159.40	193.00	183.20	173.30	162.30	147.70	132.80	119.40
Sepia Leste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.30
Sul de Lula	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	19.40	18.40
Sururu	0.00	0.00	3.30	6.50	6.10	5.80	5.50	8.40	24.60	41.20	61.30	58.00
Tambau	2.50	1.70	1.20	0.90	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tartaruga Verde	15.50	16.70	17.40	17.30	17.00	16.70	16.40	16.20	16.00	15.90	15.80	0.00
Tubarao Azul	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tubarao Martelo	0.60	0.70	0.40	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Urugua	40.00	28.90	21.70	20.30	16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Voador	2.20	1.90	1.60	1.40	1.20	1.00	0.80	0.70	0.60	7.00	0.00	0.00
Total	1353.80	1499.10	1852.80	1948.80	2108.50	2172.40	2193.60	2520.90	2496.50	2304.10	2174.40	1948.20



Appendix 4

Actual Oil Production (AOP)



Note 1 – The total oil production for each quarter is show in annual basis,
Source – ANP (<http://www.anp.gov.br/wwwanp/royalties-e-outras-participacoes/royalties>)

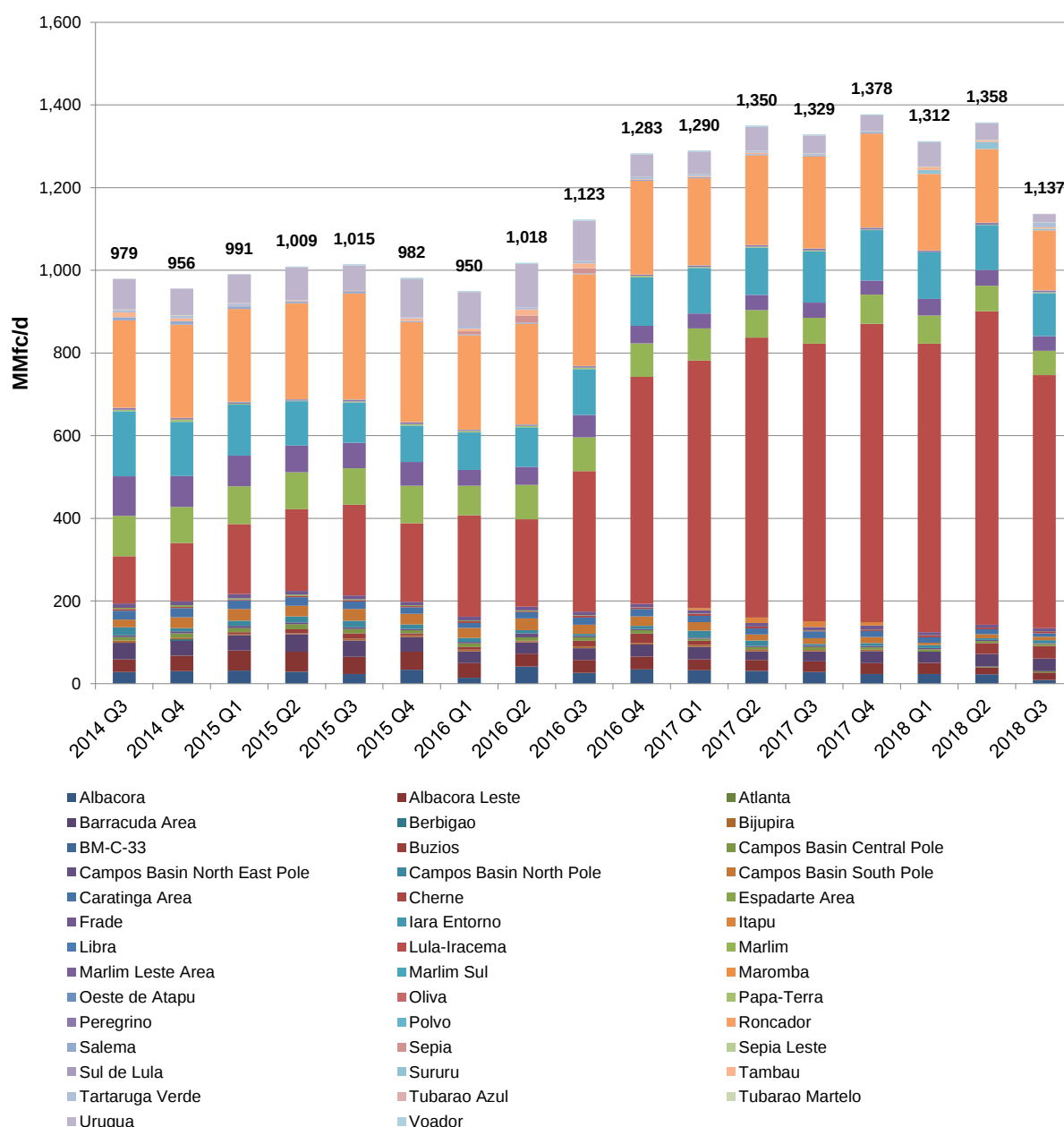
The top five grouping fields, representing 78.35% of the 2018 Q3 Actual Oil Production, and their respective percentage in the total oil production were:

- (i) Lula-Iracema: 48.81%
- (ii) Roncador: 10.19%
- (iii) Marlim Sul: 8.33%
- (iv) Marlim: 6.89%
- (v) Marlim Leste Area: 4.13%



Appendix 5

Actual Gas Production (AGP)



Note 1 – The total gas production for each quarter is show in annual basis,
Source – ANP (<http://www.anp.gov.br/wwwanp/royalties-e-outras-participacoes/royalties>)

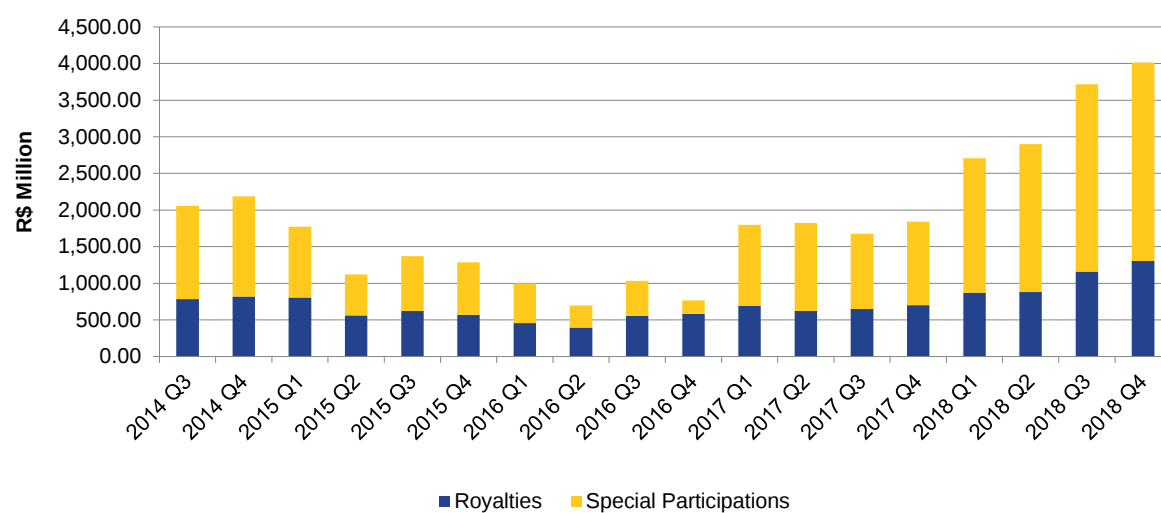
The top five grouping fields, representing 84.10% of the 2018 Q3 Actual Gas Production, and their respective percentage in the total gas production were:

- (i) Lula-Iracema: 53.88%
- (ii) Roncador: 12.76%
- (iii) Marlim Sul: 9.19%
- (iv) Marlim: 5.18%
- (v) Marlim Leste Area: 3.10%



Appendix 6

RJS Oil Revenues and RJS Oil Revenue Rights

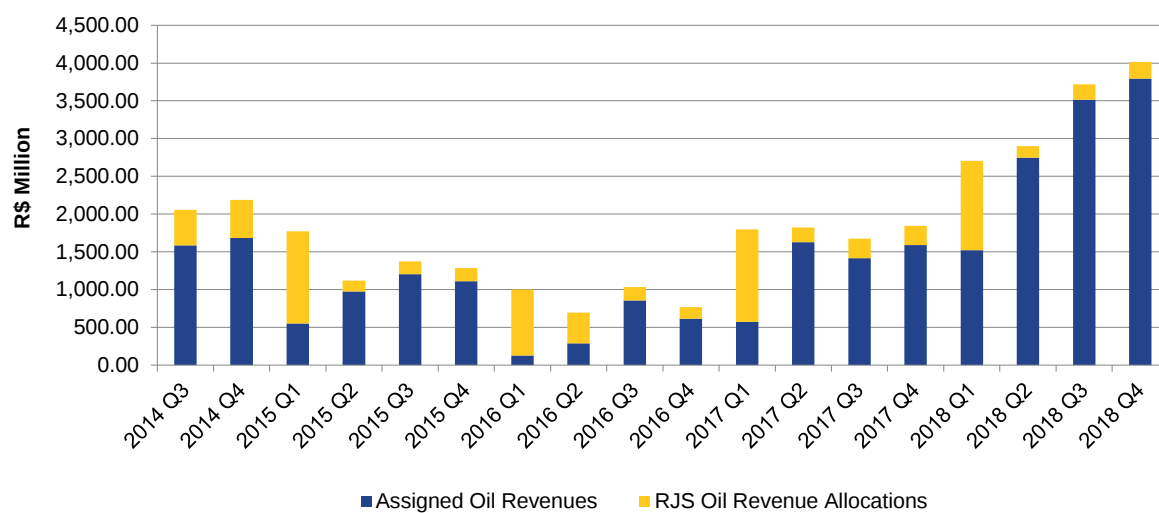


Source – Banco do Brasil S.A.



Appendix 7

RJS Oil Revenues Allocation and Assigned Oil Revenues



Source – Banco do Brasil S.A.